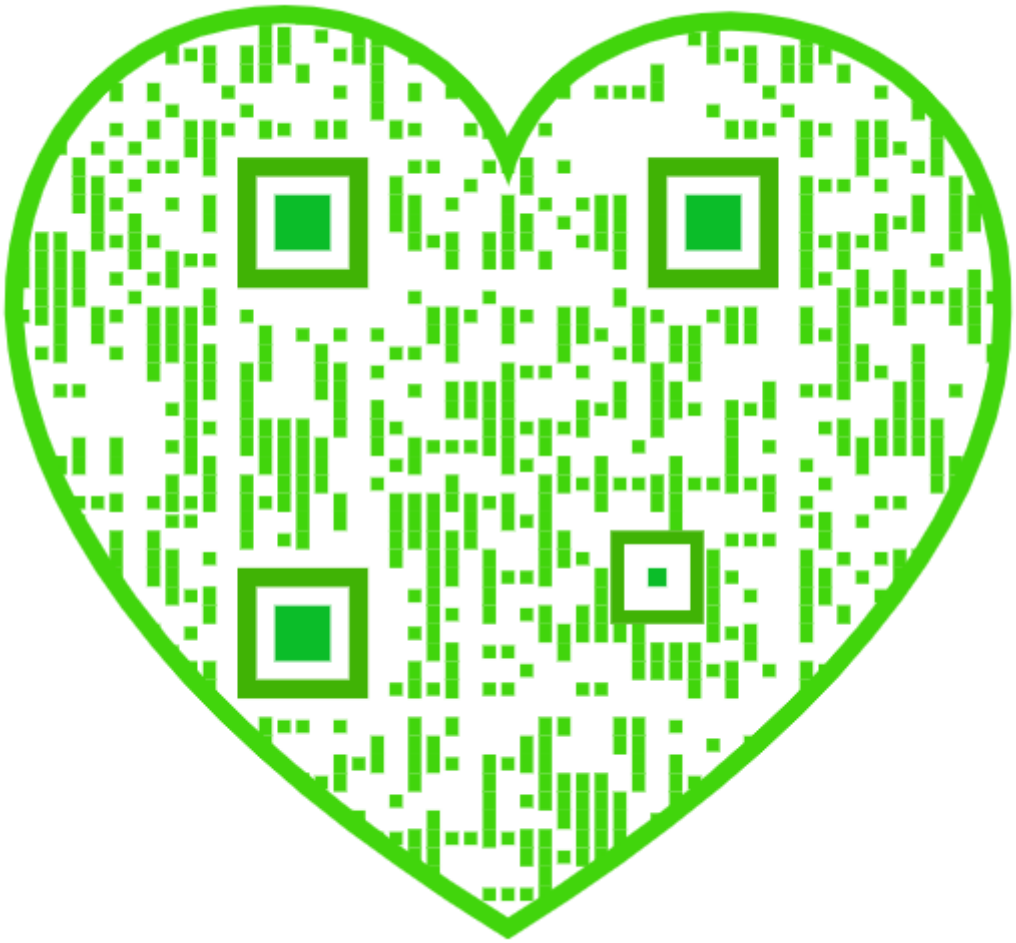
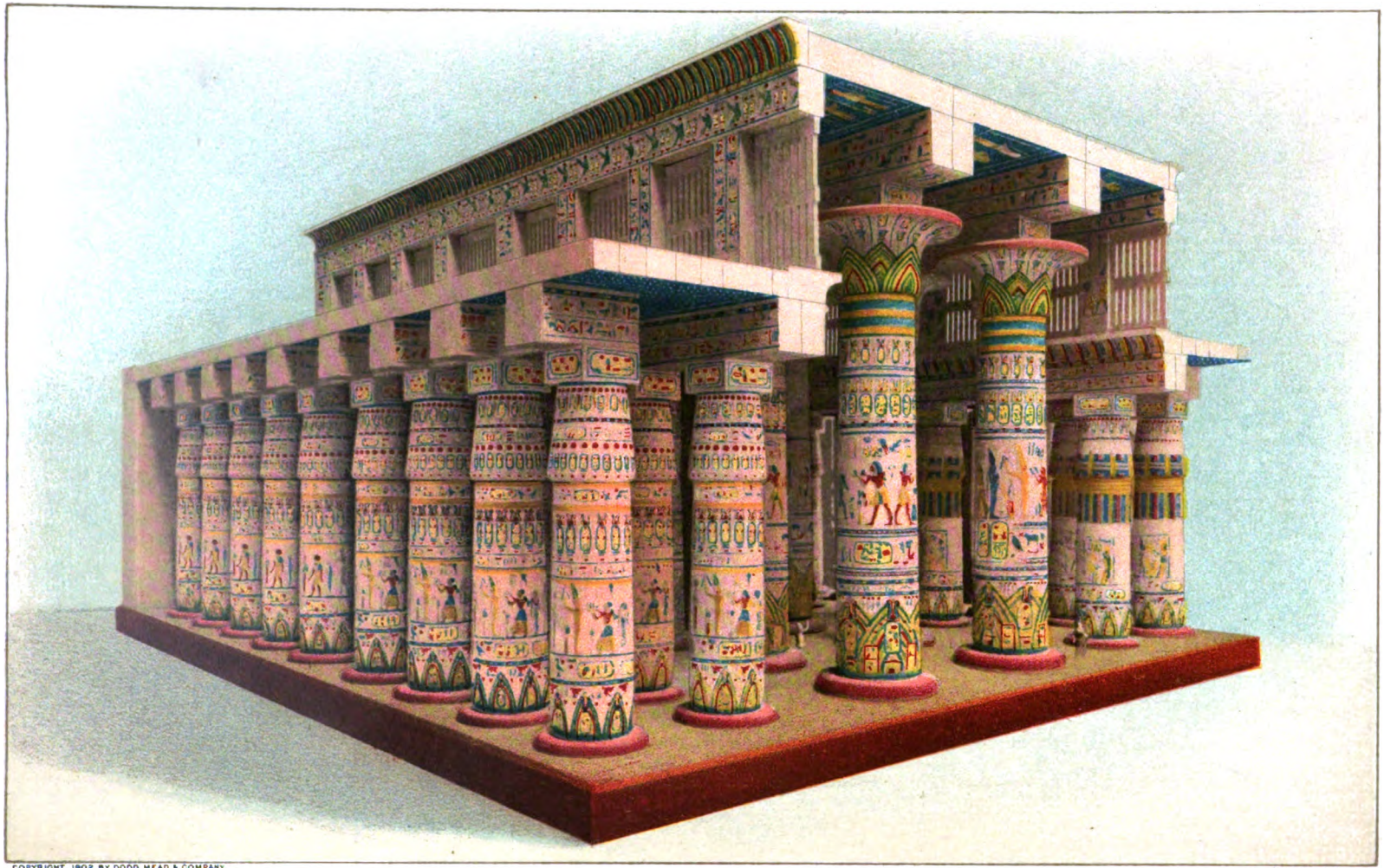


HISTORY OF ART

EGYPTIAN ARCHITECTURE



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TEMPLE OF KARNAK, FROM THE RESTORED MODEL
IN THE METROPOLITAN MUSEUM OF ART, NEW YORK

Hypostyle Hall of Great Temple of Ammon, at Karnak in Egypt. Part of the structure was finished under Seti I. and part under his son, Ramses II., who succeeded in 1333 B.C. *The picture is from the restored model in the Metropolitan Museum of Art, New York, in which the painting is closely copied, with a few omissions, from the traces found on the original.*

OUTLINES

OF THE

HISTORY OF ART

BY

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Edited, Minutely Revised and Largely Rewritten

BY

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Author of "Dictionary of Architecture and Building," "European Architecture," etc., etc.

IN TWO VOLUMES—FULLY ILLUSTRATED

VOLUME I

NEW YORK

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1904

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Published April, 1904.

PREFACE.

DR. LÜBKE'S GRUNDRISS DER KUNSTGESCHICHTE was first published in 1860. The eleventh edition was published in 1891, and was really a revised edition; but it was still the old book, containing many of the characteristics of the original issue.

Since 1891 much has been added to the scholar's knowledge of archæology and to the critic's perception of artistic truth; but, since 1860, the whole point of view has changed. The history of art which is possible to-day was unthinkable in 1860; many assumptions have been proved untrue; many known facts have wholly different explanations now, from those once thought sufficient. The amount of added fact is incredibly great and important.

It has seemed, therefore, to the American publishers of Lübke's book that an entirely new edition of it should be made, and that there was but one way of doing this, namely, to incorporate the necessary new matter with the original text. This has been done with the single desire to make the book what Dr. Lübke would probably have made it had he been writing in 1902, and in America. Thus the opinions of the author as to the relative importance of this and that school and master might not be different now, and under present conditions: and for this reason such opinions (as when bringing the Bolognese school of painters into prominence, and treating with much less proportionate respect the work of Correggio), have been left unchanged. On the other hand, when there is insistence upon the difference between Greek and Indian art, as based upon a supposed influence of the religious belief and social organization which underlie it, in either case, it has been necessary to modify the terms used; because we know more now of the Oriental habit of mind, and because it is no longer possible for the scholar to call the Greek more truly religious—the Indian a mere slave to degrading superstition. In this way, then, expressions of opinion have been modified in one case and left unchanged in another: the attempt having been always

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not to substitute the present writer's views for those of the German author, but to modify the thought of the original as would seem inevitable in view of the discoveries and the critical studies of the last forty years.

The basis of this English edition is the translation made under the supervision of Edward L. Burlingame and the editorship of Clarence Cook in 1877 from the seventh edition of Dr. Lübke's work, and the text of that translation has been retained where no change has seemed desirable. The changes, however, both from the use of the last German Edition, and the many additions of the present editor, have made necessary the entire resetting of the book. This occasion has also been taken advantage of to enrich the book with many full-page and additional text illustrations.

RUSSELL STURGIS.

February, 1904.

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OUTLINES OF THE HISTORY OF ART

Chapter I.

PREHISTORIC AND PRIMITIVE ART.

IN the intricate complexity of things around him, man tries to determine the general laws by which their true character and relation may be explained and which bring them into an harmonious connection. Only by the assurance of the possibility and the necessity for such a connection can he calmly survey the apparent arbitrariness of the separate parts, and perceive, in the successive phases of life afforded by the history of mankind, a progressive development of the ideas and spiritual facts underlying them. If this is indispensable, it is especially so in the realm of art, as in its works the character of nations and of centuries is sensibly manifested. The question, therefore, of the origin of art, confronts us at once.

This origin, however, is not so easy to establish, because everywhere we find evidence, although this is often obliterated by the productions of later civilization, that it took place in a similar manner in every region, as may be seen, even at the present day, among nations yet in an immature condition. The period of this origin is, therefore, just as uncertain as the place. One nation dates the birth of its art a thousand or ten thousand years ago; another is looking for it still to come. Only so much is certain, that in the first stirrings of an impulse to art, under all zones and at all times, a remarkable harmony may be observed. It is the original universal language of mankind, the traces of which meet us in the islands of the Southern

Ocean as on the shores of the Mississippi, among the old Celts and Scandinavians as among the heroes of Homer and in the interior of Asia; only, in these primeval times this language does not pass beyond its first stammering utterance. Man is still too much fettered by surrounding Nature: he ventures too little beyond her immediate conditions for him to be able to rise to the portrayal of images of individual freedom. Hence these primitive works seem rather the results of the workings of a general law of nature than the conscious creative efforts of individual man. The farther man advances, in the course of time, on the path of progress, the clearer stand out the differences of individual minds, and the richer are the abundance and variety of individual human character.

The simplest primitive form, produced by the awakening impulse

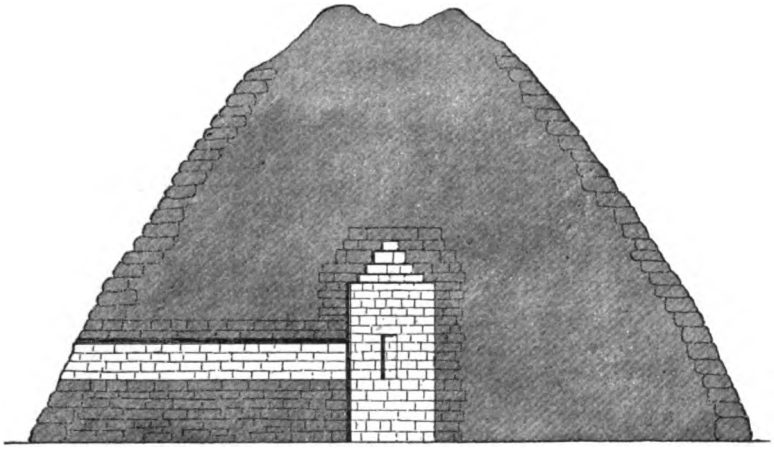


Fig. 1. Section of the Altun-Oba Sepulcher Near Kertsch, Crimea.

to art, is the mound (tumulus) of earth heaped up to mark a burying-place, as of a fallen hero. Such monuments are found in the most varied forms; and they have existed among all ancient peoples of sufficient civilization to undertake and carry out a considerable labor. Occasionally they attain great dimensions, like the mounds of Lydia, or that monument near Kertsch, in the Crimea, called Altun-Oba, which measures 100 feet in height, 150 feet in diameter, and incloses a sepulchral chamber 60 feet high, 10 feet long, and from 3 to 4 feet wide (Fig. 1). These chambers were formed by large stones firmly joined to protect the interior against the pressure of the heaped-up earth. In a few cases these monuments were also provided, as in the accompanying illustration, with an outer facing of stone blocks.

The tumuli of the ancient people of North America were very often used for burial; sometimes of many persons in a single mound; but their original purpose seems to have been rather to support in a higher and therefore more honorable place, the religious or communal building, which would often be of perishable material, low and not by itself impressive.*

In other instances there rises on the memorial spot an upright stone, such as were often engraved with characters at a later day; or a large block or table-like mass is balanced upon three or more upright stones, as in Fig. 2; or merely a mighty block of stone erected by the joint effort of many hands, rough as the mountain yields it, or as some primeval flood has left it. Here man's work is scarcely distinguishable from the casual formations of nature;

Fig. 2. Stone Monument at Trenithy, Cornwall.

the inner associations which man, of his own will, connects with it, alone give it significance. The numerous combinations of such blocks of stone—the stone circles, the grottoes, the rude, table-like altar-forms of stone which we constantly meet with—by the magnitude of the ground plans or by the colossal size of the stones and the unusual character of their positions and combinations, are more capable of affecting the imagination. The awful sense of something mysterious, mighty—ay, even fearful—seizes us with feelings similar to that by which the foreboding of divinity declares itself among people yet in a natural and undeveloped condition. Here, too, we first perceive a striving after architectural unity and proportion, after composition and a certain harmony. Two mighty blocks of

* Consult F. S. Dellenbaugh, "The North Americans of Yesterday," in which are references to authorities and sources of information.

stone are erected and a third is placed as a lintel upon them. A number of such combinations are arranged in a circle, or in several wide circles, one within the other; and the central point of the monument is thus unmistakably indicated. Thus it is with the famous stone circle (Fig. 3) near Salisbury, Wiltshire, England. Here the outer circle is formed by thirty stone pillars each about

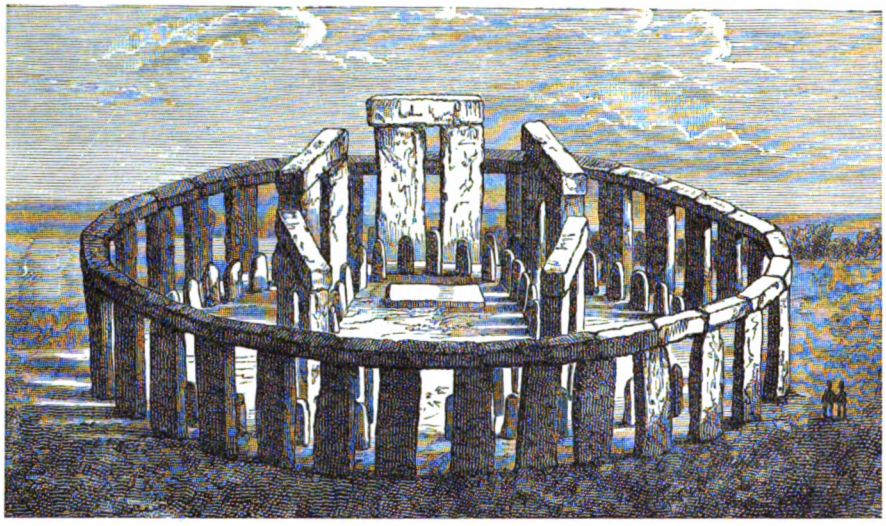


Fig. 3. Stonehenge.

15 feet in height, which were connected by mortised stone beams. In the interior were ten still more colossal pillars about 21 feet high, connected in pairs by similar stone beams. In the intermediary space were two more circles of smaller pillars (see the plan, Fig. 4). The great monument at Abury, or Avebury, also in Wiltshire, occupies far more ground than Stonehenge; the great circle having been about 1,250 feet in diameter, as against about 100 feet in the more impressive and better-preserved monument. Two double stone circles (Fig. 5) are inclosed by the larger circle, and the latter is surrounded by a deep moat which had once another rampart within and close to it. An earthen mound, called Silbury Hill, is close at hand, as shown in the figure, but no connection is traceable between the two monuments. At the stupendous monument at Carnac, Brittany, there were perhaps five thousand mighty pillars in eleven parallel rows, still traceable for a distance of nearly two miles.*

* See Waring's "Stone Monuments, Tumuli, and Ornaments"; also Fergusson's "Rude Stone Monuments."

Besides these monuments we meet with combinations of stones having more apparent utility, being set side by side and fitted rather closely together; often having the obvious purpose of grave-chambers to be covered with the earth of the mound. Advancing a step

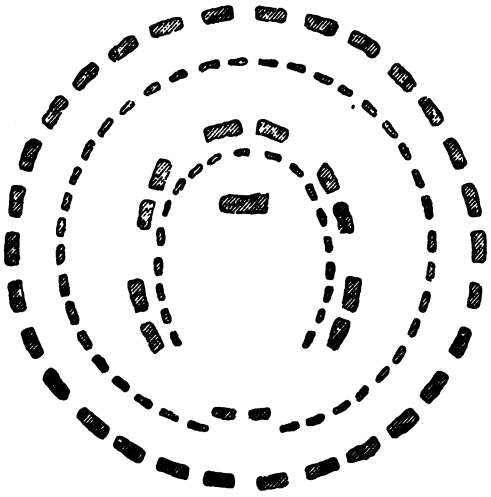


Fig. 4. Plan of Stonehenge.

farther on the same stage of art, we find a better monumental construction; the tomb-chambers being closed at top by gradually projecting the layers of stone until they meet over the center, and thus

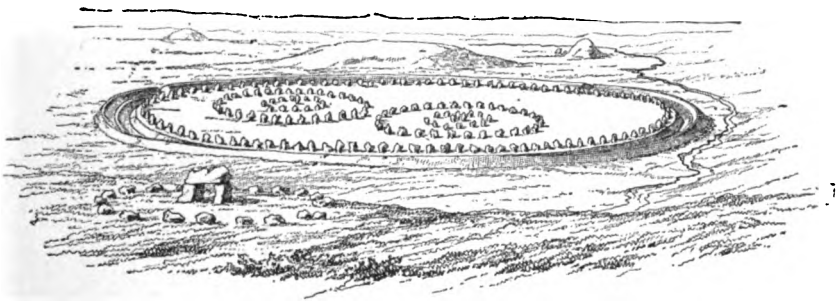


Fig. 5. General View of Abury Circles, Wilts.

a kind of vault is formed (see cut, plan, and section of the Treasury of Atreus at Mycenæ, in "Greek Art," ch. I.). Other tombs are inclosed in a more simple manner by making two or more stone slabs rest obliquely against each other, like the rafters of a roof

(Fig. 6). The monuments of this primitive period do not belong exclusively to the Celtic and Germanic prehistoric ages, but are scattered far and wide over the surface of the whole earth, as if to

Fig. 6. Arch at Delos. Fergusson. (From Stuart's "Athens.")

prove that everywhere among men art has had one and the same beginning. We find these remains in Scandinavia, England, and Ireland, in Brittany, and in North Germany (in Hanover and the

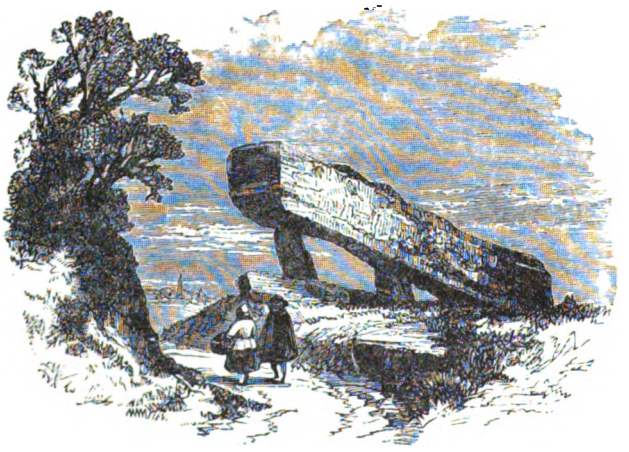


Fig. 7. Dolmen (Pierre levée) in a suburb of Poitiers, thirteen feet long and three feet thick.

Baltic provinces); also in India and Asia Minor, in Egypt, on the north coast of Africa, and in the region about the Atlas Mountains. The Breton and Cornish names are commonly adopted: thus a

Menhir or Peulvan is a single stone set upright—called also Bauta when in Scandinavia, and Cath Stone or Battle Stone when thought to be a record of victory; Dolmen or Cromlech, a structure of several stones more or less upright, carrying a large and often somewhat flat block. These pass insensibly into the Cistvaen, because it is never certain whether a given Dolmen was intended to be covered by the earth of a mound. Long Cromlechs are structures like several cromlechs close together, forming a single covered alley;

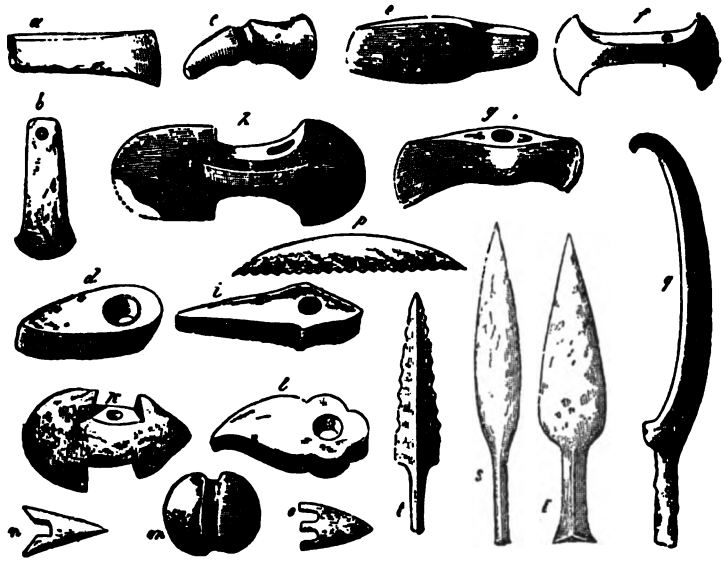


Fig. 8. Stone Implements and Weapons.

a, c, e, ax-heads intended to be secured by cordage to wooden handles; *b, d, i, e,* ax-heads or picks with holes for the handles, though cording will still be needed; *f, g, h, k,* double-edged axes (twibils) for similar use; *m,* head of a club with groove to assist the mounting; *p,* tool with saw-toothed edge; *q,* sickle-shaped tool, probably a hook; *n, o, r, s, t,* arrow-heads and spear-heads.

resembling a very large cistvaen. Loggan stone, or Loggan, is a name given to a stone so balanced that it can be easily rocked, although of enormous weight. Galgal is the same as Cairn. Cairn is a roughly made pile of stones; a mound, but of rather large stones instead of earth and gravel. The early pyramids of Egypt may be considered as great cairns. Menan-Thol (the word *men* occurring in several of these names signifies stone) is a stone pierced with a hole. Kistvaen, same as Cistvaen. Cistvaen, a stone burial chamber, usually a mere box covered by the earth of a tumulus. The portable objects which have been preserved to us from the time of

the rude stone monuments are chiefly tools and weapons. The earliest are of stone (see Fig. 8). Weapons and implements of bronze succeed the stone objects; not that the epochs can be fixed in most cases, but that the obviously natural growth of industry is in that direction; facility in using metals and alloys by means of fusion and casting being a later growth of human intelligence. Fig. 9 gives a group of these objects. Fig. 10 shows a number of utensils of earthenware dating from the Bronze Period, a fact which is ascertained partly by the ornamental patterns upon both the

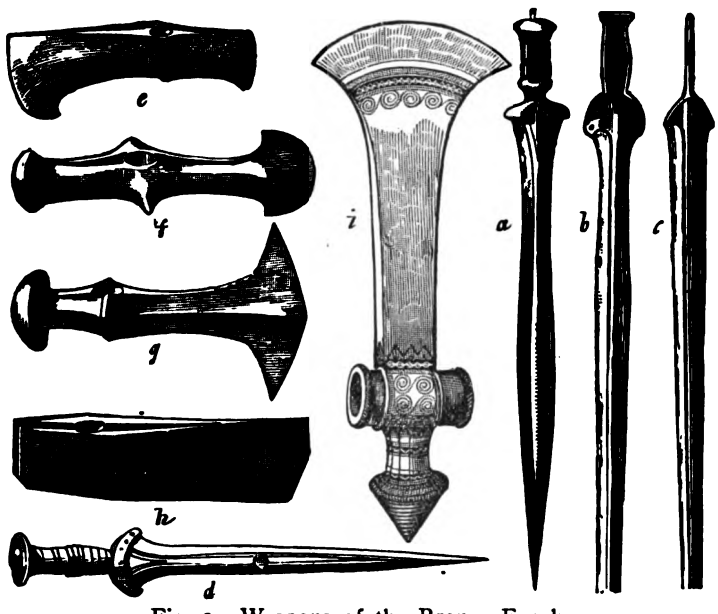


Fig. 9. Weapons of the Bronze Epoch.

e, f, g, stone ax-heads which have been worked by means of metal; *h,* bronze ax-head with ornaments copied from stone originals; *i,* bronze ax-head of the fullest development; *a, b, c,* bronze swords; the flat tang of the handle intended for a double facing of wood, horn, or bone; *d,* dagger entirely of bronze.

metal and the earthen utensils, and partly by the discovery of these pieces in the same graves or among the same ruins. Fig. 11 gives a number of pieces of personal adornment, jewelry, and the like; also of the Bronze Epoch; a time at which metal work was varied, elaborate, and rich.

A further stage in the progress of art * is marked by the cut

* Consult: I. D. Von Braunschweig, "Ueber die altamerikanischen Denkmäler"; Berlin, 1840. Lord Kingsborough, "Antiquities of Mexico." J. L. Stephens, "Incidents of Travel in Central America, Chiapas, and Yucatan"; New York, 1841; and "Incidents of Travel in Yucatan"; New York, 1843. E. G. Squier, "Nicaragua: Its People, Scenery, Monuments, etc."; New York, 1852; "Peru"; London, 1876-77;

stone monuments of Central America. Although these, in their highest perfection, do not occur till a period contemporary with the European Middle Ages, they mark a primitive stage of artistic creation, such as other nations had probably passed through in ancient times. The monuments of Peru, witnesses to the once mighty kingdom of the Incas, which was destroyed by the Spanish invaders in 1532 after a duration of several centuries, have a strong individual character. The remains of the mighty road, which stretched for miles through the country, boldly victorious over the most extraordinary difficulties of soil, astonish modern travelers. Other remains testify a predilection for terraces, and a use of the

Fig. 10. Vessels of the Bronze Epoch.
c, f, cooking vessels; *a, b, d, e,* vessels for food richly ornamented with incised or raised patterns; *g,* details of the patterns.

so-called Cyclopean stonework, familiar to other primitive peoples all over the world; that is, of walls consisting of irregularly formed blocks of stone fitted carefully together, and the interstices filled with smaller pieces. The door openings are contracted at the top so as to have a triangular form by means of the gradual projecting of the stones, as shown, for instance, in the remains of the so-called palace of Manco-Capac. Imposing ruins of palaces are to be seen at Tiaguanaco near Lake Titicaca with vast pillared halls and mighty portals conspicuous for ornamentation, singularly unpretending and clear. The extensive remains at Truxillo, designated

"Notes on Central America"; New York, 1855. J. F. Nadaillac, "Prehistoric America"; New York, 1884. Stubel and Uhle, "Die ruinenstätte von Tiahuanaco im Hochlande des alten Perú"; Breslau, 1892. R. B. Brehm, "Das Incareich"; Jena, 1885. And as above, Mr. Dellenbaugh's recent work.

as the palace of Chimu-Canchu, also have an original decoration of friezes and staircase-like ornamental bands, denoting a keen taste for the appropriate ornament. In the southern part of Quito, finally, in the valley of Cuenca, considerable ruins have been found, and in their tombs an abundance of treasures, gold, jewelry, weapons, and vessels, the linear system predominating in their ornamentation, although vegetable forms also occur. In Mexico and Central America, especially under the rule of the warlike and powerful Aztecs, art

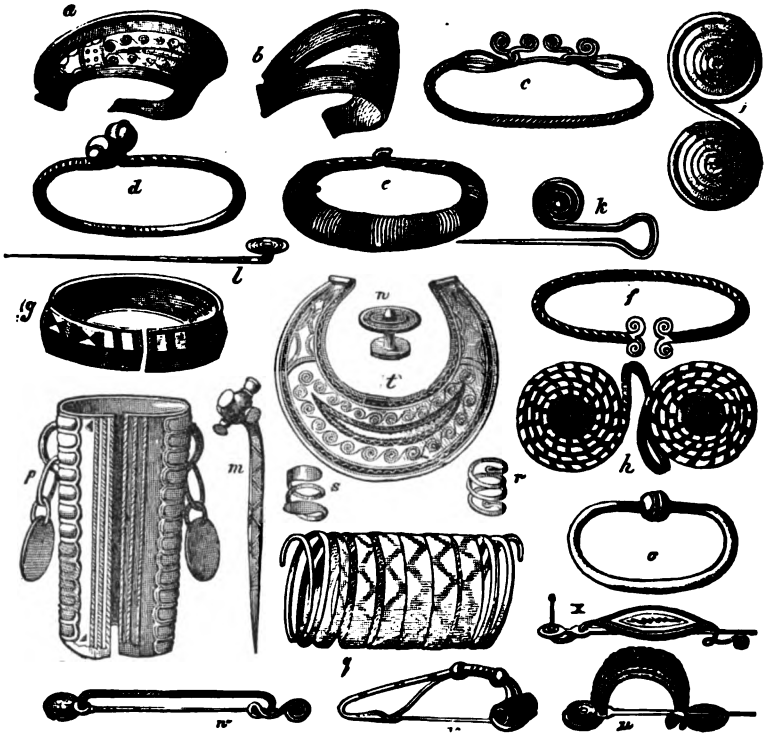


Fig. 11. Jewelry and Ornaments of the Bronze Epoch.

h, l, m, n, pins with ornamental heads; *u, v, w, x,* clasp pins (the modern safety-pin); *r, s,* finger-rings; *c, d, e,* head bands which in *a, b,* approach the quality of crowns (the Greek *stefani*); *t,* neck ornament like the *hausse-col* of the eighteenth century; *f, g, h, o,* armlets; *q, p,* spiral armlets covering much of the arm.

reaches the utmost height to which the mind of the primitive races of America could attain. The stone remains of this people, so highly developed to a certain extent, afford even now striking proofs of their incapacity to attain to a higher culture. We find among them the primeval monumental form common to every people, reduced among them to a settled type—that of a pyramid rising in several terraces. Vast courts inclosed in walls, and with the dwell-

ings of the priests connected with them, formed a complicated temple building, of which that of the Teocalli of Guatusco is an example (Fig. 12). Broad steps led to the height of the platform, where captured foes were slaughtered as sacrifices to the horrible war-god Huitztilopochtli. Numerous monuments of this kind are to be found at Xochicalco, Papantla, Guatusco, Tehuantepec, and in other places.

In these works, more or less important remains of which have been preserved, we also discover the primitive development of a second impulse—that craving for ornamentation and decoration which almost always accompanies the awakened desire for monu-

Fig. 12. The Teocalli of Guatusco.

mental memorials. Two things here serve the creative fancy as motives—first, plaiting or weaving employed by the earliest pastoral tribes in the manufacture of clothing, tent-cloth, carpets, and curtains, and suggesting many varieties of square and rectangular meanders and interlacings; second, the forms of vegetable and animal life. The ornaments of the first kind are generally richer and more tasteful in device, and are more neatly executed; they constantly exhibit motives of an artistic kind, such as would seem to have been shared by the human race originally as a common heritage. They are early applied to works of architecture, at first, indeed, in luxuriant overloading, without distinctness, rule, or systematic arrangement; so that not unfrequently they cover the whole surface like tapestry, and conceal the construction. Many of the later Mexican monuments, especially those at Uxmal, are conspicuous for this (Fig. 13).

In Mexico and Central America the statues and reliefs with which the structures are very lavishly covered appear fantastically overdone, distorting the organic form almost to shapelessness. It is especially the monstrous specimens of headgear, consisting of feathers, scalps, human sculls, and grotesque pendants of every description, which impart to these works the impress of confused visions and fantastic horrors. The human form seems stifled in a strangely barbarous ornamentation. The old places of worship that have been discovered in the South Sea Islands represent a still more primitive stage of productiveness. They are either simple pyramidal cairns of the roughest kind (such as are found

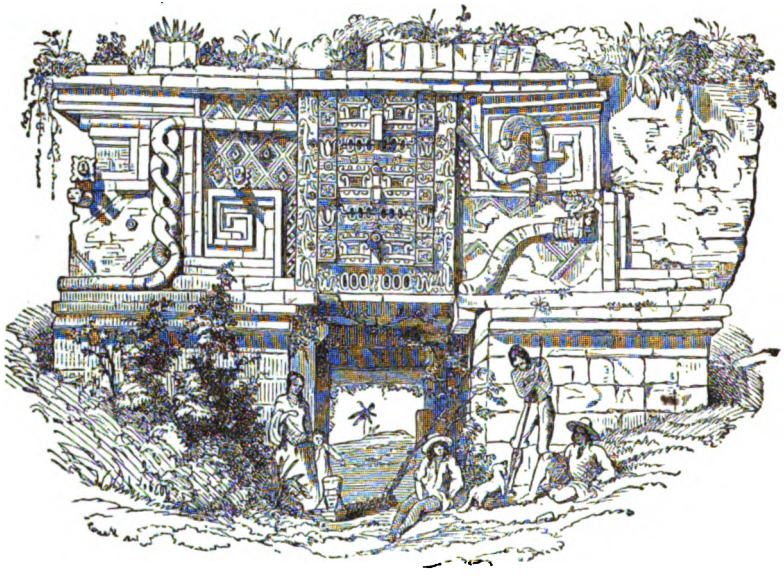
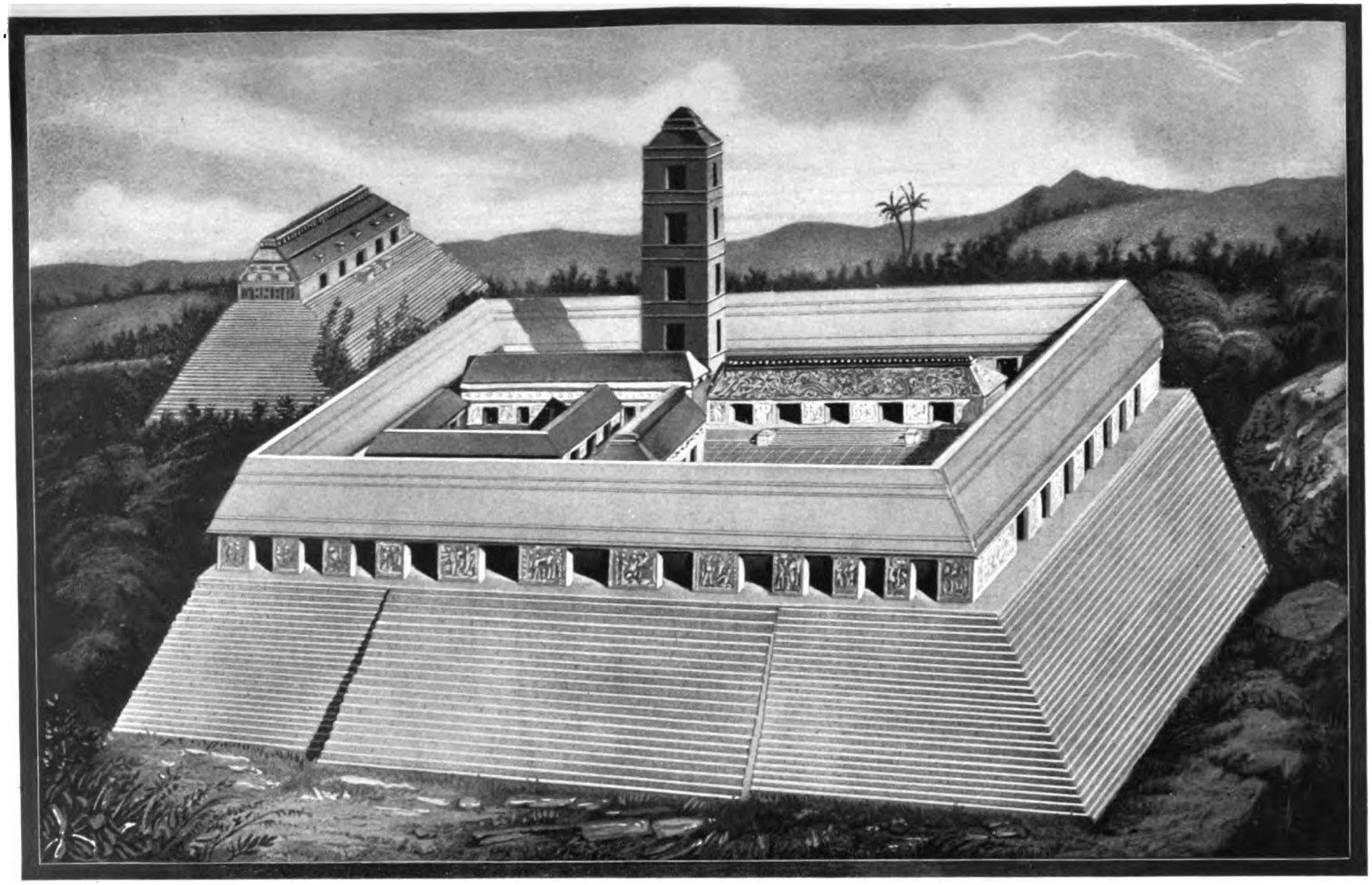


Fig. 13. Casa de la Monjas at Uxmal.

on Easter Island), or regular terraced pyramids, in which the most primitive monumental form has acquired a more firmly marked type, as may be seen especially in Tahiti. In this island, walls of great coral blocks surround the sacred precincts, within which arose a structure of the same material, in the form of a terraced truncated pyramid, rising in ten steps to a height of about fifty-six feet. Colossal memorial pillars with rudely suggested human limbs and abnormal heads, often comprising one-third or even one-half of the entire figure, have also been found in certain islands of the Pacific, and these are closely allied in style to the dwarfish and deformed figures carved in wood which have been brought to Europe and are found in many collections.

Palace-Temple at Palenque in Southern Mexico, Province of Chiapas. The name is that of a modern village, but the ruins are of the unfixed epoch before the Spanish conquest. The plan of this building, with its long flights of steps, is common in Central America and may be compared with the Assyrian palaces, which also were erected on high platforms. The print is a conjectural restoration.



MEXICAN ARCHITECTURE

THE TEMPLE OF PALENQUE—RESTORATION

The cemeteries of Peru have yielded an abundant supply of pottery vases and useful vessels displaying a singular variety of form. Decoration is not freely applied; the smooth black ware has rough incisions or slight relief. The same tombs have yielded a great number of interesting woven fabrics. Work of later date within the bounds of the present United States may be seen in the pottery of the communal villages of Arizona and New Mexico. Textile fabrics and carved wooden objects from islands of the Pacific made during the nineteenth century are similar in character to the above, and denote a civilization of a class comparable to that of North America, and also of South America at earlier but uncertain epochs.

The division of civilizations into the Rough Stone Age, the Polished Stone Age, the Bronze Age, and the Iron Age, has been generally abandoned, because these epochs have not been found to be contemporaneous in the different parts of the world. When the whites reached North America the native people were still in the Stone Age. The inhabitants of many Pacific Islands were still in the Polished Stone Age at the time when their indigenous civilization was replaced by that brought in from Europe and the United States. It can only be said of a single people or of a single land that there are evidences within it of these successively advancing eras; moreover, it has constantly happened that a given race has been checked in its natural development by the interference of a higher physical civilization; thus, the American Indians never passed through the Bronze Age at all, their stone tomahawks and scalping knives having been replaced by steel weapons procured from the whites.

Chapter II.

EGYPTIAN ART.

1. *Land and People.*

ON the banks of the Nile and of the Euphrates we meet with the earliest traces of artistic activity, and those of the African river-banks are far more enduring and are therefore better known. As a higher state of early civilization is generally displayed in valleys watered by rivers, we find this especially and conspicuously the case here. The inhabited and historical parts of Egypt are the work of the Nile. Flowing down from the lofty mountains of Abyssinia, the river, swollen with the mass of waters in the tropical rainy season, rises annually with the utmost regularity, covering the narrow, rock-inclosed valley with its floods, depositing, as it subsides, an extraordinarily fruitful alluvial soil. This state of things, even in very ancient times, was the source of prosperity and of a high degree of civilization. The wonderful stream compelled the inhabitants not merely to build protecting dikes and embankments, but it also early made necessary a system of irrigation, by which its blessings might be regulated, and uniformly distributed. It even gave the first impetus to scientific studies, since the regular return and subsidence of the waters early became a subject of observation, and, with the help of astronomical study, a matter of learned computation. Indeed, the whole life of the people, dependent as it was on the river, acquired a distinct outward form, a fixed rule and order; hence a spirit of strict conformity to law was early familiar to the Egyptians.

Undoubtedly, however, the natural disposition of this remarkable people contained the germs which, under the fostering influence of outward circumstances, unfolded in such a characteristic manner. We may suppose that, in the prehistorical ages, the people of the Pharaohs passed into the rich valley of the Nile from their dwellings in Western Asia, crossing the Isthmus of Suez, that bridge of nations, over which, through thousands of years, the races of Asia

and Egypt streamed to and fro both for war and peace. We may suppose that they partly subjugated the aborigines and partly supplanted them, and laid the foundation of the Egyptian civilization with its distinctive features. The character of this people was utterly separate and isolated; and while their native river is strangely distinguished from all other rivers of the world by the fact that, in its whole course through Egypt and the northern and more historical part of Nubia—a land the length of which is equal to the distance from London to Florence, or from the seaport of Havre to Vienna: from New York to Chicago or Savannah—it receives no single tributary, not even the smallest, so the ancient Egyptians rejected with proud reserve all intermingling with foreign elements. Thus the land lay, like one long oasis, protected by its rocky walls, and surrounded by the sandy tracts of the desert; and thus the people, like some oasis of civilization, towered with fullness of vigor above the surrounding races, who were inferior to them in culture and in development.

The form of government in which Egyptian life remained petrified for thousands of years was that autocracy common to the whole East. But the sober, practical, sensible turn of mind peculiar to the Egyptians prevented them from yielding to that enervating voluptuousness so common under the Asiatic despotisms, and directed their minds to useful and energetic work. The Pharaohs certainly ruled with unlimited power; and so high was their position above the whole people, even above the privileged castes of priest and soldier, that they shared divine adoration, and were identified with the gods of the land. There was, however, an extremely complicated web of legal and ceremonial arrangements, which fettered the power of the ruler, and commanded his respect. Next to the ruler, the priestly caste enjoyed the most considerable influence. The priests were the guardians of science, especially of geometric and astronomical knowledge, which they knew how to envelop with a veil of mystery; they were the superintendents and warders of the temple, the guardians of the theoretical and practical religious systems.

Their religious belief was deeply rooted in a polytheistic system, the forms of which were, for the most part, only symbols of events and circumstances connected with the peculiar nature of the country. Something of abstract ideas may have lain at the foundation of this system; yet the mode in which they were expressed to the senses was somewhat crude. Thus the gods were represented as if in the image of the divinely esteemed Pharaohs, in human form: but to the upper and nobler parts, especially to the head, a distinct animal form was sometimes given, differing in the different gods; some ani-

mals, noxious as well as harmless, received divine adoration, or, at least, were reverenced as symbolical of divinity, and were embalmed like human beings at their death. This custom of embalming is also closely connected with the religious notions of the Egyptians. They believed, though in a rather material than spiritual manner, in a perpetual existence after death, in the separate life of the soul, in which they regarded themselves as living forever; and further, in a double, or more spiritual body, the Ka, for whose sake the earthly body must be preserved for the time when the Ka might seek its old earthly home. Hence their extraordinary care for the dead, their systematic reverence for the tombs; treating the abodes of the departed with far more importance and solemnity than the dwellings of the living, which were only raised to meet ephemeral needs, and were as easily destroyed as they were built. All this imparted to the character of the ancient Egyptians a trait of earnestness which revealed itself in all their being, whether it assumed the form of unalterable laws or of religious conservatism, or became, in private life, their settled rule of conduct. By their dress, mode of life, and manners, no less than by their language, and by the figurative, significant, but clumsy hieroglyphic writing employed by them alone, they were distinguished from other races, and felt themselves, in their proud self-consciousness, so far superior to all other nations, that they avoided even peaceful contact with them, and prohibited all strangers from entering the sacred kingdom of the Pharaohs, or at least made it very difficult for them to do so.

The beginning of the political life of Egypt is lost in the impenetrable obscurity of remote antiquity. Four thousand years before Christ, however, the oldest Egyptian kingdom existed in the lower part of the land, with its capital Memphis. The first three dynasties is set down by Flinders Petrie as about 4800 to 4000; by Brugsch, as 4400 to 3700 B.C. Even at the time of the fourth dynasty (about 4000 to 3700 B.C., Flinders Petrie), magnificent dikes and waterworks were constructed, and the pyramids were erected, the founders of which—the Pharaohs Chufu, Shafra, and Mencheres called by Herodotus Cheops, Chefren, and Mycerinus)—all belonged to the fourth dynasty of Manetho.* The ruling family had probably migrated from Western Asia, and had become mingled with the aborigines of the country. Besides the Pyramids of Memphis, the rocky tombs associated with them testify to the art activity of that

* Manetho of Heliopolis was an Egyptian high priest, and keeper of the sacred archives, in the third century before Christ, under the first two Ptolemies. He wrote in Greek a history of Egypt, of which nothing but fragments remain. These fragments, in addition to an account of the Hyksos, furnish the complete lists of thirty dynasties, extending over more than thirty-five hundred years.

earliest epoch of the "ancient kingdom." A second flourishing period began with the twelfth dynasty, somewhat more than two thousand years before Christ. At this period, in the obelisk erected at Heliopolis by King Sesurtesen I., we meet for the first time with this remarkable form of monumental column so peculiar to the Egyptians. Similar monuments soon after began to be erected over a large extent of country, an evidence of the resistlessly advancing and increasing power of the Pharaohs. The tombs of Beni-Hassan, in Central Egypt, exhibit the style of this epoch in its grandest expression. But, about the year 2000 B.C., conquerors from Western Asia, under the name of the Hyksos, invaded the land, and drove back the power of the Pharaohs to Upper Egypt. This interregnum lasted about six hundred years, until about 1400 B.C., when the invaders were vanquished and expelled by King Sethos I. The "new kingdom" now rose to the height of prosperity, its capital being Thebes with its hundred gates. The eighteenth and nineteenth dynasties, with their mighty rulers, especially the great Rhamses II. (the Sesostris of the Greeks), witnessed the golden age of Egyptian civilization, as is proved by the many temples and monuments still remaining. Imperceptibly, however, and probably resulting in part from increased Asiatic influence, dissensions, divided policy, disputes among rulers, and frequent political changes began, and broke the old strength of the nation. The Assyrians conquered the land as far up the Nile as Thebes. The wise Psammetichus attempted another regeneration by the help of Greek mercenaries, about the year 650 B.C.; this, however, lasted but a short time; for, under his immediate successors, Egypt became a prey to the Persians; and afterwards fell, with the Persian empire itself, before Alexander the Great. So indestructible, nevertheless, was the national tenacity of the people, that in the monuments of a late period, even under Greek and Roman rule, the foreign conquerors adhered to the native forms of art, consecrated as they were by the tradition of centuries.

2. *The Architecture of the Egyptians.**

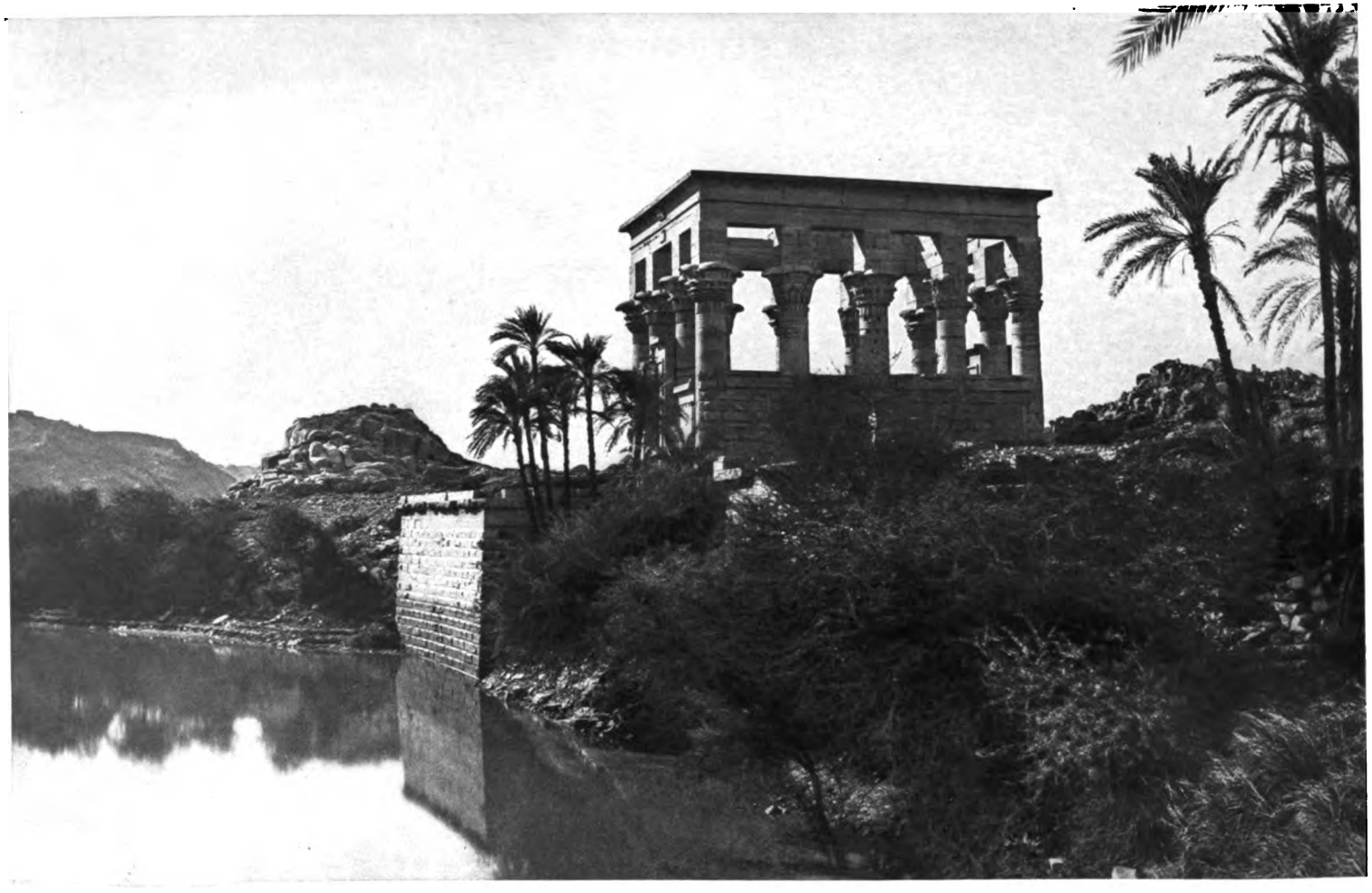
The earliest monuments to which we can assign an approximate date are the Pyramids in and near the ancient Memphis. They rise aloft like gigantic landmarks of history, memorials of an age which reaches back into an almost fabulous antiquity. They mark the epoch at which a higher civilization first took root on the earth;

* Brugsch, H. K., "Egypt Under the Pharaohs." Perrot and Chipiez, "Histoire de l'Art dans l'Antiquité," vol. i. Petrie, W. M. Flinders, "History of Egypt"; "Egyptian Decorative Art"; "Ten Years' Digging in Egypt." Prisse d'Avennes, "Histoire de l'Art Egyptien."

and thus at the same time they point to the beginnings of historical life and of monumental creations. There is no longer any doubt that the earliest of these monuments are of the fourth Egyptian dynasty, dated by Flinders Petrie 4000 to 3721 B.C. The pyramid at Medum, forty miles above (south of) Cairo, and the mastabas or table-top tombs about it, are ascribed to the first king of this dynasty, Sneferu, called also Soris. The pyramid as it now is shows a tower-like mass with very steep sides, for the smooth outer casing has disappeared. There is an inclined passage leading to the burial chamber in the heart of the pyramid. Against the eastern face of the pyramid is built a small one-story structure inclosing a square court; this was certainly a temple; and the pyramid and temple together are surrounded by a wall, forming a sacred inclosure. The step-pyramid at Sakkarah has been thought to be the oldest of all; it is certainly to be considered with that of Medum.

The successor of Sneferu was Khufu, the Cheops of the Greeks, and his tomb is identified with the Great Pyramid of Ghizeh. The immense mass of these artificial mountains—the largest is reckoned to hold eighty-five millions of cubic feet—inclosed a small stone-built chamber containing the sarcophagus of the ruler. Narrow, steeply inclined passages, the openings to which are concealed by a coating of blocks of stone covering the whole exterior, led into the tomb within; and still smaller ducts or flues carried upward diagonally served for ventilation. The most various and ingenious precautions in construction secure the roof of these chambers against the immense pressure of the mass above. Either the mighty stone beams of the roof are supported like rafters against each other, or, in order to discharge the weight, a system of hollow spaces, one above the other, is contrived above the chamber, formed by the projection of the horizontal layers of stone. The building of some of the pyramids, as may be still perceived by several of those which were left unfinished, was made after the plan of a terrace-like step-structure, diminishing as it rose; while the angles formed by the steps were filled up in a reverse manner, beginning from the top, and forming the regular sloping pyramidal figure. There are examples of pyramids which have been made much larger than was originally intended, by having, at a later period, received a complete new casing over the first one; such is the pyramid of Menkaura (the Mycerinos of the Greek writers), the third in size of those at Ghizeh. The material for these mighty buildings consists, in some instances, of limestone, and others of bricks. The most primitive architectural works in Egypt were formed, most probably, of wood, for the earliest wall-paintings show many such structures. Mud plas-

Temple at Philae in Upper (Southern) Egypt. The buildings are generally of a very late epoch—probably as late as the Roman control over Egypt, and perhaps of the time of Trajan, 98-117 A.D.; *but the graceful form of the small building in the picture, which is commonly called the Pavilion of Trajan, has caused it to be taken as a type of the purely decorative Egyptian style.*



EGYPTIAN ARCHITECTURE
TEMPLE AT PHILÆ

tered over light frames was used, even for elaborately designed monuments, as appears from the forms of the stone monuments, evidently suggested by the earlier and less permanent structures. Sun-dried brick as well as burned brick were used from the earliest historical times, as in Mesopotamia. The desire for the highest monumental character in their buildings, however, led the Egyptians early to make use of the rich quarries of every kind of stone afforded by the mountain ranges on both sides of the Nile. In the pyramids, too, we find the working of stone already brought to such a high degree of perfection, that we may argue long practice in the art.

The three largest pyramids are in the neighborhood of Cairo (six miles southwest), near the village of Ghizeh; and, from their inscriptions, they owe their origin to the kings Khufu (Cheops), Shafra (Chefren), and Menkaura (Mycerinos). That of Khufu

Fig. 14. Sphinx and Pyramid of Ghizeh.

is the oldest; at its base it measured originally more than 750 feet square, with a height, as calculated, of above 470 feet. Next in size, as in antiquity, is the pyramid of Shafra, which had a square base of 764 feet, with a height of 455 feet. Considerably less in extent is the pyramid of Menkaura (Mycerinos), which measures only 354 feet square, and 218 feet in height; but it surpasses both the others in some parts of the execution, as in the granite facing of the lower part of the slope. When entered by Colonel Vyse (in 1837), the sepulcher still contained the sarcophagus of the king; but in its transport to England, the latter was subsequently lost off the coast of Spain. On the east side of each pyramid there is a small shrine, probably designed for funeral obsequies. Although only ruined remains are left of these structures, there exists in the neighborhood of these three gigantic buildings a proportionally no less gigantic

work of sculpture, which manifests a similar striving after grandeur of effect; namely, the colossal Sphinx, standing in front of the group of pyramids—a mighty lion's body with a human head (Fig. 14). This work of sculpture, which is almost completely covered over with the sand of the desert, except where some temporary uncovering has been done, is 65 feet high, and 142 feet long, and is entirely cut out of an isolated ridge of rock. Its date is wholly unknown. It was the opinion of an excellent judge, Auguste Edouard Mariette, that it was older than the neighboring pyramids; this opinion seems to have been held also by G. C. C. Maspero; but the researches of the last thirty years of the nineteenth century threw doubt upon that theory. As to the question whether any masonry was used to make good the natural rock, and complete the form, authorities differ.

In the immediate vicinity of the greater pyramids there are six smaller ones, all royal tombs, and also some extensive private tombs, usually of the mastaba shape. These private tombs are more or less deeply hewn out of the natural rock. They begin with a small sanctuary intended for funeral rites; and from this a perpendicular shaft leads down into the sepulcher itself. Besides numerous metaphorical representations, the interior is frequently decorated with architectural ornaments, imitating in gay colors a wooden trellis-work. The lintel of the entrance also distinctly reminds us of a wooden construction; for in many cases there is a cylindrical, trunk-like beam uniting the two door-posts; and even the ceilings of the apartments are repeatedly made in imitation of pieces of wood fastened together. Where the size of the apartments has rendered support necessary, this has been introduced in the form of square pillars, which are united either by a rectangular architrave or by rounded beams. A ribbon-wound astragal surrounds the walls, which are crowned with a strongly projecting concave molding forming a wall cornice, surmounted by an abacus; a form which, we shall see, passed also into Persian art. Both of these forms prevail through the whole duration of Egyptian art. The use of columns as an architectural feature does not seem to occur in this epoch.

Other very early pyramids are at Abu Roash, Abu Sir, and other places along the edge of the high rocky cliffs which bound, on the west, the fertile valley of the Nile. During the ancient empire, or during the first twelve dynasties, the royal tomb was generally a pyramid; although often of inferior material, and never comparing in size to the more ancient monuments.

A second golden age of the ancient kingdom, about 2700 years B.C., and comprising the twelfth dynasty, is marked in the first place by the mighty obelisk of King Sesurtesen (Osirtasen) I. at Heliop-

olis. In this work, peculiarly characteristic as it is of the Egyptian mode of thought, the rude stone monumental pillar has transformed itself into a fixed geometric figure, rising upward as a monolithic mass with a square base, gradually diminishing, and ending in a pyramidal point.

The use of obelisks as memorial stones of peculiarly sacred character is known to be much more ancient, but the great one known as the "obelisk of Heliopolis" is the oldest one still remaining in place. They were always set up in pairs—one on each side of a great gateway of entrance. The long inscriptions of the triumphs of kings and the like incised upon their smooth faces are not the primary cause of their placing: they are in some way expressive of

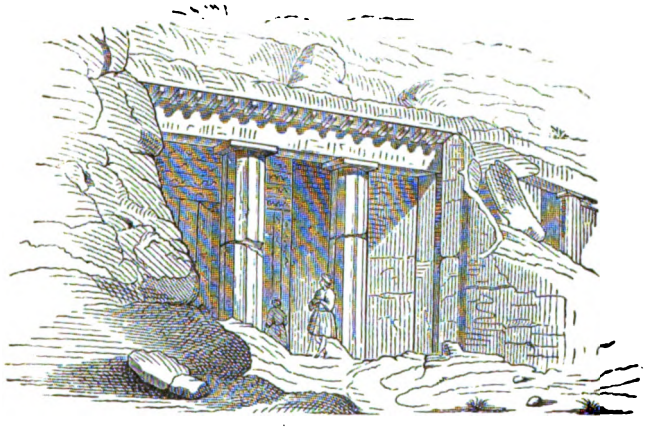


Fig. 15. Tomb of Beni-Hassan.

the sun-worship which lay at the very bottom of all Egyptian religion.

Another great architectural landmark of this epoch is to be found in two of the rock-cut tombs of Beni-Hassan in Central Egypt (Fig. 15), at the entrance halls of which, as well as in the interior—for the first time, it seems—a regular and finished colonnade appears. We see here how the square pillar gave place to the octagonal, and then to the sixteen-sided form; the latter having shallow, concave flutings, in order better to mark the narrow sides. Above the architrave which connects the columns, there is a cornice designed in imitation of the projecting rafters of a wooden roof. The column is connected with the ground by means of a circular disk; it is separated from the architrave by a large projecting square plinth. Besides this form of column we here meet with another, evidently fashioned in imitation of vegetable forms. The shaft, which is sharply drawn in at

the foot, seems composed of four united plant stalks, fastened together at the upper narrowed end by a band several times wound round them. Above this band—the neck of the column—rises the capital, also in four divisions, in the form of a closed lotus-flower, and crowned with a square plinth.

When, after the expulsion of the Hyksos, the new kingdom rose with the eighteenth dynasty into greater power and splendor, owing to the growing national pride of the Egyptians, Thebes became the center of rule; and here for centuries the proud ambition of the Pharaohs found satisfaction in the execution of the most magnificent monuments. Far beyond the lower country—indeed, deep into Asia, and up the Nile into conquered Nubia and Abyssinia—the tokens of the dominion of the Pharaohs were displayed in mighty works. The period of the highest development extends from the eighteenth to the twentieth dynasty, from the beginning of the sixteenth to the end of the thirteenth century B.C. In this period especially, the system of Egyptian architecture was fully completed; an ever-recurring form for the design of the temples was adopted; and the different parts of the building were brought into an harmonious and characteristic whole.

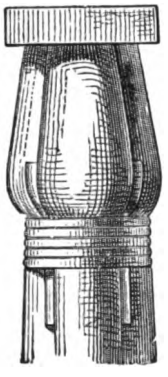


Fig. 16. Capital of Tomb of Beni-Hassan.

The Egyptian temple was a strictly isolated building (Fig. 17). Huge sloping walls, crowned with the overshadowing concave cornice, surround its inclosure, and invest the whole with a solemn and mysterious character. No opening for windows, no colonnade interrupts the monotonous surface of the temple wall, which is often covered as with a gigantic tapestry, with brilliantly colored intaglio sculptures, representations of the gods and the rulers. On the short side of the vast parallelogram, on that facing the river-bank, stands the narrow, lofty entrance, between two tower-like, sloping structures (pylons), rising high above all the rest of the building (Fig. 18). In front of these pylons, hollows are made for the insertion of great masts, which, on festive occasions, were surmounted by pendent flags. The entrance gate, like the pylons and the surrounding walls, is crowned with the same lofty cornice which plays so great a part in Egyptian architecture. Extensive double rows of colossal sphinxes or rams often lead to the entrance, which is sometimes guarded by obelisks, or gigantic statues of rulers (see Fig. 17).

Entering through the narrow portal, we find ourselves in a forecourt under the open sky, inclosed all round, or on three sides, with stone-roofed corridors, which are built against the surrounding walls,

and open toward the court with colonnades. This forecourt is never lacking in Egyptian temples; it is sometimes, in important buildings, repeated after a second or even a third pair of pylons. This forecourt is succeeded by a hall, often no less in extent; and the mighty stone ceiling of this hall rests on columns placed in rows. The two middle rows, corresponding with the longitudinal axis of the building, consist of stronger and taller columns, which support a higher ceiling; so that a lofty central nave is formed, with a clere-story the side walls of which supply the apartment with light through broad and mullioned windows. Passing through this hall, which is also an integral part of an Egyptian temple, the sanctuary

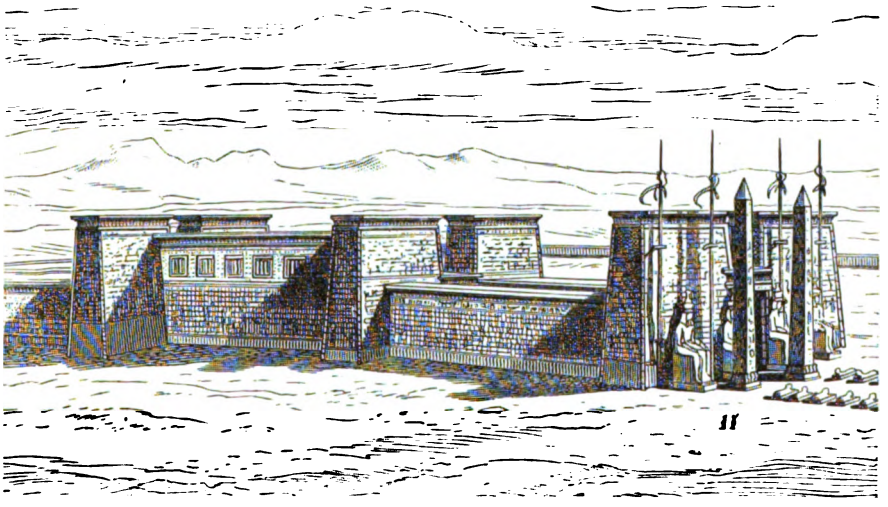


Fig. 17. Restored View of an Egyptian Temple.

is reached by a succession of smaller or larger apartments and halls, the innermost of which is the narrow, low, and mysteriously gloomy adytum. Little that is certain is as yet known with regard to the use and importance of the separate apartments: in some cases a statue, in others a tabernacle with relics or a symbolical object, was kept in the innermost shrine; much as in Jerusalem the only thing in the Holy of Holies was a decorated chest containing the tables of stone. Probably the inner courts were accessible only to the priests and to the initiated, who there solemnized the worship of the gods; whilst the adoring multitude may have filled the vast forecourts. In all the apartments, the ceilings, pillars, and walls, like the outer walls, are covered with metaphorical figure subjects, which, with their varied and splendid colors, and the wonderful

symbolism of their designs, increase to the utmost the strong impression made by the buildings themselves.

The remains of the "hundred-gated" Thebes, mighty even in their ruin, are scattered over a vast area on both banks of the river, and have been named after the modern villages established among the rubbish of the decayed city. Among them, the Temple of Karnak stands forth as the largest and most important. Founded by Sesurtesen I. in the time of the ancient kingdom, it received, under the rulers of the later kingdom, constant additions and enlargements; so that finally, with a breadth of 370 feet, its length exceeded 1130 feet. Passing through the mighty gateway with its flanking pylons, to which an avenue about 200 feet in

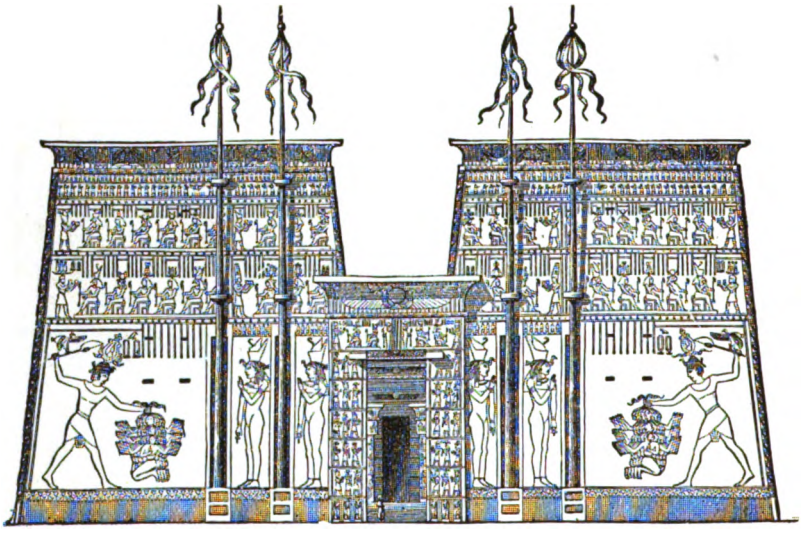


Fig. 18. Restored Front of an Egyptian Temple with Pylons and Gateway.

length of colossal ram-sphinxes, led up, a spacious forecourt was reached, 329 feet broad, and 275 feet deep, with a covered corridor on either side, and a double line of columns down the center. A notable violation of the laws that regulated the plan of an Egyptian temple meets us in this forecourt, the northern wall of which is broken by a smaller sanctuary, about 200 feet long by 80 feet wide. This temple, which is entered from the court itself, was added, at a much later period, by Rhamses II. Passing from the forecourt, between two still more colossal pylons, the famous hypostyle hall was reached —the mightiest in the world—built by Sethos I. and his successors during the fourteenth and fifteenth centuries B.C. Its stone ceiling was supported by a hundred and thirty-four columns, the middle

twelve of which, larger and taller than the rest, inclose a lofty central nave. These central columns rise to a height of 66 feet; while the smaller ones, distributed in seven rows on either side of the central twelve, are only 40 feet high. This immense hall, with its area of 55,930 square feet, is like a magnificent cathedral. A third propylon closed the great hall on the eastern side. Beyond, on the east side, and extending across the entire width of the building, is a narrow, uncovered court, in which stood two granite obelisks, erected by Thutmes I.; and behind these was a fourth propylon, at which the true sanctuary begins. Here in labyrinthine complexity are open and covered courts, chambers, chapel-like apartments, and columned halls, connected by corridors and galleries strangely intermingled; so that nowhere so plainly as in this gigantic monument

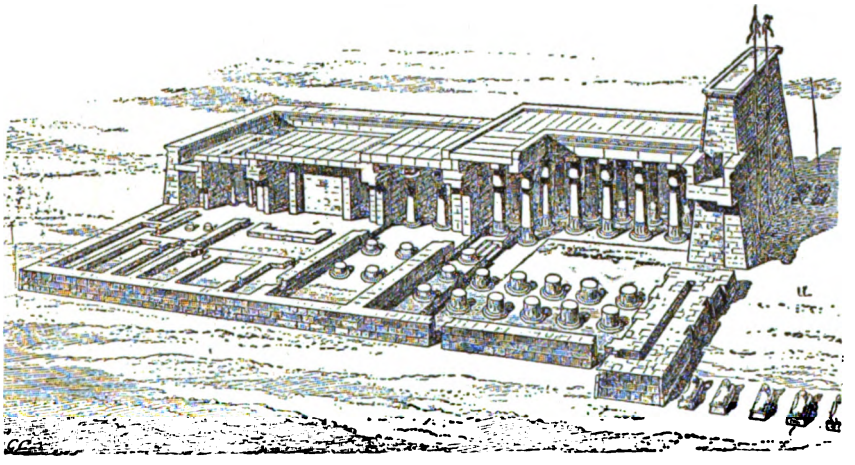


Fig. 19. Temple of Chensee at Karnak.

do we see the intricate system of inclosure that prevails in Egyptian architecture. Significant colossal figures are often placed against the walls, combined with projecting pillars; all the surfaces are covered with richly painted imagery, in which symbolic subjects and religious ceremonies alternate with historical representations of royal heroic deeds. The inner chambers were chiefly built by Thutmes III. and his sister.

As was usually the case, the details of the architectural ornamentation are here also principally displayed in the columns, for which there were clearly defined forms, of the grandest effect, and fully corresponding with the powerful impression of the whole. Thus, in the great columned hall, the smaller columns have the closed lotus capital, already seen at Beni-Hassan (Fig. 16). But the slavish

imitation of the natural growth of the plant is no longer sought for as it was there: the capital is changed, like the stem, into a compact, concentrated mass, the surface of which is decorated with gay hieroglyphics (Fig. 20). But, in the larger columns of the two central rows, a new form of capital appears (Fig. 21), which takes for its motive an opened lotus calyx, and thus introduces a new artistic form into the established system of architectural ornamentation. In order that the widely projecting edge of this capital might not be weighed down and broken, the small square plinth was retained, as in the other capitals.

The column itself is of sturdy proportions (Fig. 22); its shaft, with a heavy entasis tapering toward the capital, rises upon a circular plinth and its base is covered with gaily painted leaf orna-

Fig. 20. Capital at Karnak.

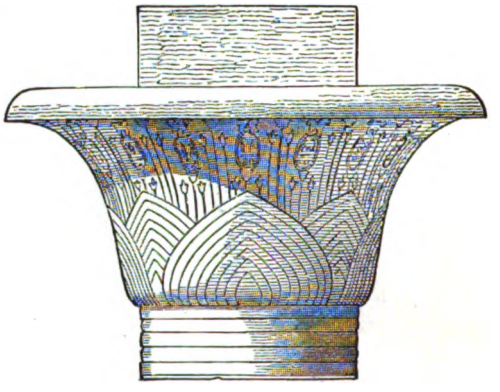


Fig. 21. Capital at Karnak.

ments; while it is bound to the capital by similarly painted decorations which determine the necking.

Among other buildings belonging to this group is the great Temple of Luxor, which is connected with the temple at Karnak by an avenue of colossal sphinxes; and also the so-called Sepulcher of Osymandyas, really a temple erected by Rhamses the Great—one of the finest monuments in Egypt. Farther up, on the western banks, are the important remains of a temple at Medinet-Habu; and farther north there is a temple at Kurna, which, irregular in design and without a propylon, has in front a portico of ten columns. It bears an inscription with the date of Sethos I. The powerful impression made by all these ruins is increased by two colossal sitting figures, which formerly belonged to a temple now entirely destroyed. The most northern of these is the famous so-called statue of Memnon. According to their inscription, they owe their origin to King Amen-

hotep III., and represent his mother and consort. There are besides, on the western side of the river, extensive rocky tombs, in which the rulers of the Theban dynasty were buried with their families. These tombs of the Theban necropolis lie in narrow, desolate mountain defiles, where the rocky cliffs which begin the desert rise above the alluvial land. We first come upon those of the queens (Biban el Sultanat), and next upon those of the kings (Biban el Molûk), of the eighteenth to the twentieth dynasty. In one of these tombs, that of Sethos I., commonly called Belzoni's Tomb, after the name of the discoverer, a dark shaft leads from a forecourt into the depth of the rock, and opens into

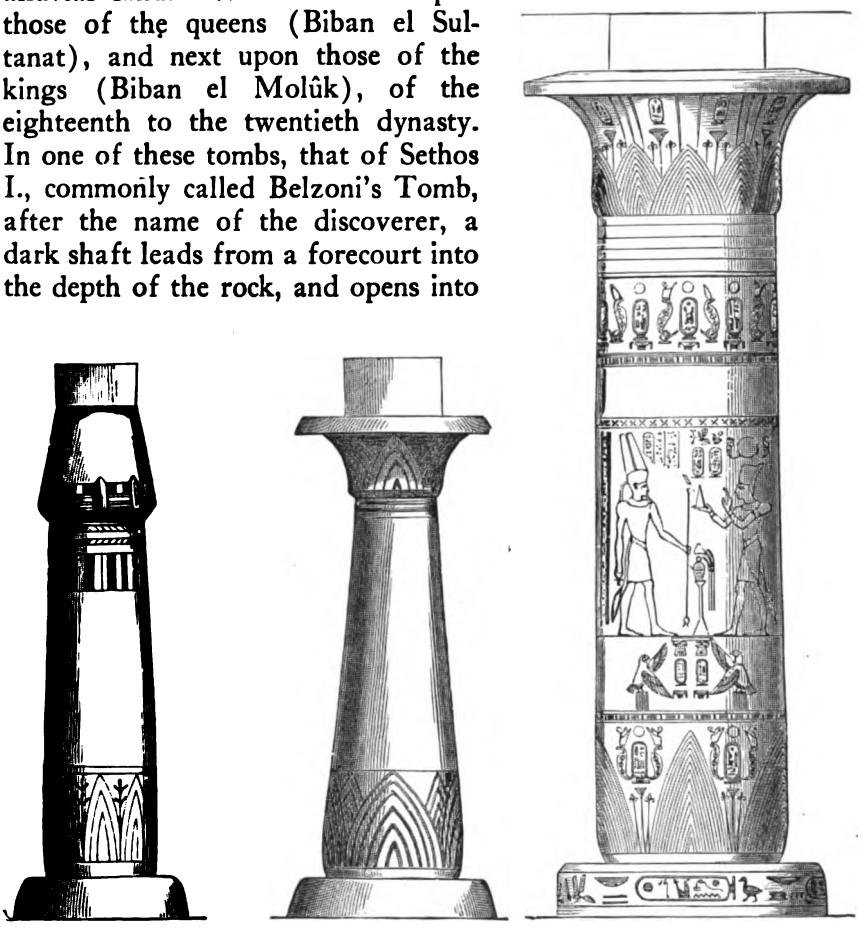


Fig. 22. Egyptian Columns.

a large hall, the ceiling of which rests on pillars; and, from the splendor of its wall-paintings, it bears the name of "the golden." Here stood the sarcophagus of the king, and the richly painted representations on the walls relate to his destiny after death. Other important monuments meet us farther south, especially in Nubia. Many of these sanctuaries exhibit an essentially

different form, the ground-plan being more simple, and their cella being surrounded with a corridor of pillars, or piers, as is the case with the southern temple built by Amenhotep III. on the Isle Elephantine (Fig. 23). Other important monuments are the rock-cut temples of Girsheh, Derri, and Ipsambul, the latter having a lofty façade of rock, richly chiseled, the principal decoration of which consists in immense colossal statues of Rhamses the Great.

The later epochs of Egyptian architecture exhibit in their works generally less grandeur of plan; but this is compensated by a richer and more varied handling of the architectural members. It is especially in the capitals of columns that the motive of the opened calyx of the lotus-flower appears in the most beautiful variations. In addi-

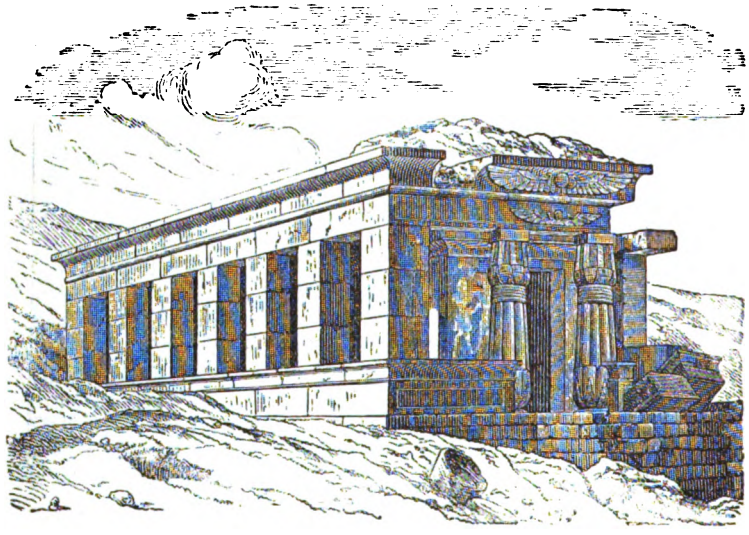


Fig. 23. Temple at Elephantine.

tion to these rich forms, we find one that is entirely fanciful in its symbolism—that of the head of the goddess Hathor, repeated four times on four sides of the capital, on the top of which a cube-like structure, fashioned like a small temple, received the entablature (Fig. 25). The most important of these later designs are those of the temple on the Island of Philæ, erected under the Ptolemies; the magnificent temple at Edfu, and the ruins at Esneh; and, lastly, the splendid temple at Denderah, founded by Queen Cleopatra. The pyramidal form repeatedly occurs in this later period, as seems to be indicated by the pyramids in the peninsula—the so-called Island of Meroë in Nubia. These works, compared

Courtyard front of the vestibule leading to the sacred enclosures of the Temple of Horus at Edfu. It is the most perfectly preserved of all the important buildings of Egyptian art. It was built during the Ptolemaic dynasty, about 240-210 B.C. *Alternation of capitals of different designs is a marked feature of the order. The concavo-convex reliefs carved on the great screen between the columns are of extraordinary interest.*

EDFU

TEMPLE OF HORUS

THE GREAT COURT, AND THE ENTRANCE TO THE HYPOSTYLE HALL

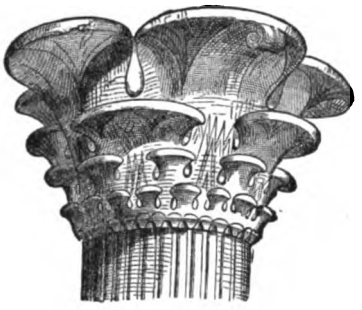


Fig. 24. Capital from Edfu.

with the pyramids of Memphis, are not only very much smaller, but also steeper, and more slender in form, with small forecourts or pylonic buildings in connection with them. The largest are about 100 feet high. Their height is about equal to one side of the square base; and in this we are reminded of the famous Roman tomb of Caius Cestius, which is 114 feet high and 90 feet square, and which is of a date only a few years later than that generally given to the Nubian pyramids.

3. *The Sculpture of the Egyptians.*

During a period of more than three thousand years, sculpture, the true companion of architecture, produced among the Egyptians an abundance of monuments in no wise inferior to the grandeur of their architectural works. But just as the architectural forms, if we set aside certain peculiarities of treatment, remain essentially the same throughout that long period, affording us an example, only possible in the East, of an activity ever in motion, combined with a formal, monotonous style, devoid of the power of deeper organic development, so is it also with the art of sculpture. Whatever finer distinctions in the conception of forms may have been discovered by the ingenuity of more modern research, the indwelling idea, the range of view, the relation of sculpture to architecture—ay, even the types and subjects of representation—remained the same for thousands of years, fixed and unchangeable as the nature of the Nile Valley.

Fig. 25. Capital from Denderah.

The reason of this remarkable fact can only be found in the position which the arts of representation occupied among the Egyptians. This position may be briefly summed up in the statement, that sculpture and painting, whether used in decorating the immense wall-spaces and columns and ceilings with figures and reliefs, or rearing colossal figures in front of the entrances, against the pillars of the courts, or in the interior of the sanctuary, were strictly subordinated to the archi-

tecture. It is true that much sculpture existed, both painted and in rich and costly hard material, which was not attached to any building, and might even be considered as movable as modern portrait or ideal statuary, but the most important monuments, which set the style and determined the character of all, were of the architectural clan. It is true that in all countries this has been the condition of the plastic art; and, even among the Greeks, sculpture especially had to conform to the forms of architecture. Still, in the Græco-Roman world the chains were soon burst asunder; and works of sculpture, resting on their own strength, stood apart from the creations of architecture in a beauty of their own. That this spirit of the free development of the individual work of sculpture was less common among the Egyptians is the deeper reason why the plastic art could not rise in this people from its dependent position, as in some sense a formal and hieratic art, bound by too rigid self-imposed laws of pose and character; and this even in its noblest works. We have here pointed out that element which characterizes the Oriental turn of mind in general, which subordinates all their artistic productions to the inexorable laws of architecture, and stifles in the germ all individual intellectual life. In the same manner, although with national modifications, we shall find this the case with all the other races of the East.

Fig. 26. Wooden Statue. Found by Mariette at Sakkarah. Museum at Boulaq. Commonly called the Sheik el Beled (Arabic), the head man of the village.

In this respect it is certainly a remarkable trait that Egyptian sculpture aims decidedly at portraiture in its oldest works, in the remains left us of the early period of the old kingdom of Memphis. This is to be seen not only in the two remarkable priestly figures in the Louvre at Paris, and in the small figure of a scribe in the same collection (Fig. 28), but also in the seven sitting statues of King Chefren which Mariette found in the neighborhood of the pyramids, and which are in the museum at Boulaq. This realistic tendency appears with astonishing clearness in a wooden figure belonging to the same early period, and also in the museum at Boulaq (Fig. 26); which proves that a high degree of freedom in the lifelike representation of natural forms had thus early been arrived at. If, in such remote antiquity, we see a conscious, artistic striving after individual characterization, we might suppose that a free and vigorous independent plastic

art would develop itself; but very soon the marked naturalism which prevailed in the early time was obliged to yield to the stronger taste for a style more in accordance with the architecture of the country. Even when a deeper spiritual sense begins to lie beneath the features, when the living expression of subjective feeling and of individual mind was to be expressed in the liniaments, the insurmountable barrier of architectural subordination arose. Hence, in spite of the taste for portraiture and for incident, there is the endless repetition of the same kingly figure; hence in the sphinx avenues, as in the pillared halls, there is the monotonous return of the same statues, with the same fixed, typical expression, the same imposed attitude, the same symbolic attributes; so that the human form, like that of the animals, is held fettered by the general conception of the species—the one in no way superior to the other, either in expression, or in the marks of distinctly stamped individual being. This strict uniformity controls the entire bearing in all statues. In the sitting figures of architectural compositions the feet are placed equally side by side; the upper part of the body maintains a strictly solemn position, the head directed forward with a fixed gaze; and, as if to crown the apathetic repose of the whole, both arms, with their flat, outstretched hands, fit close to the upper part of the body and to the thighs, as if molded at one cast (Fig. 27). The same absolute repose is preserved by the standing figures frequently placed against the front of pillars, the same fixed look—legs closely joined, and arms crossed over the breast. Still, these mighty figures, which Egyptian art loved to fashion in colossal size, are as different from the dreamily tender or wild, fantastic figures of the Hindoos as they are from the strong, compact, and somewhat coarsely inclined creations of Assyrian art. Early Egyptian sculpture presents to our view a

Fig. 27. Statue of King Schafra, Cairo.

sinewy, slender, and elastic race of beings. Breast and shoulders are without roundness, broad and powerful; the arms long, sinewy, and muscular; the body, with slender hips and legs, inclining rather to leanness than to stoutness, and everywhere exhibiting in the clearly expressed play of muscles the physical capacity of a people accustomed to work and to endurance (Fig. 28). The heads, in spite of their predilection for portraiture, have a decided national stamp of unmistakable Egyptian character, that is of firm and masterful type—which we recognize as that of the men who gradually subdued and settled the land previous to 4000 B.C., and who maintained an uninterrupted control for two thousand years.

With the eighteenth dynasty, however, this is changed (Fig. 29). There is then a trace of Semitic descent. The form of the skull is flat; and this, joined to the extremely low and receding brow, gives the idea of a deficiency of idealism. The small, oval, and obliquely placed eyes suggest acuteness and cunning. The nose, with the delicate bridge slightly curved, coming out from between the broad, prominent cheek-bones, is brought into close union with the projecting lower parts of the face, to which the mouth, with its voluptuous lips and its corners drawn upward, gives an expression of sensuous love of ease. We perceive even in the changed physiognomy of the race that a great influx of Syrian or other Northern (Semitic) blood into Egypt had taken place. This must have come from the conquests made by the Egyptian kings in the North. Captives by thousands were brought into Egypt, as the wall-paintings show and as the inscriptions relate; and these would be, first, female slaves whose children by Egyptian fathers would form a numerous mixed race, and, secondly, handicraftsmen whose work would be demanded for the most important monuments. It is evident from the representations of objects brought as booty or tribute that the work of the Asiatic races in precious metals and decorative objects was greatly esteemed by the Egyptians. For this twofold reason, then, the heads assume a more or less Asiatic form during and after the reign of Thutmes III., about 1440 B.C.

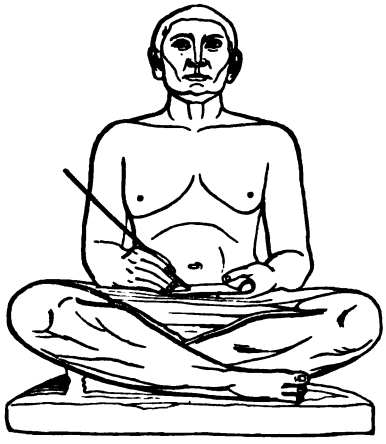
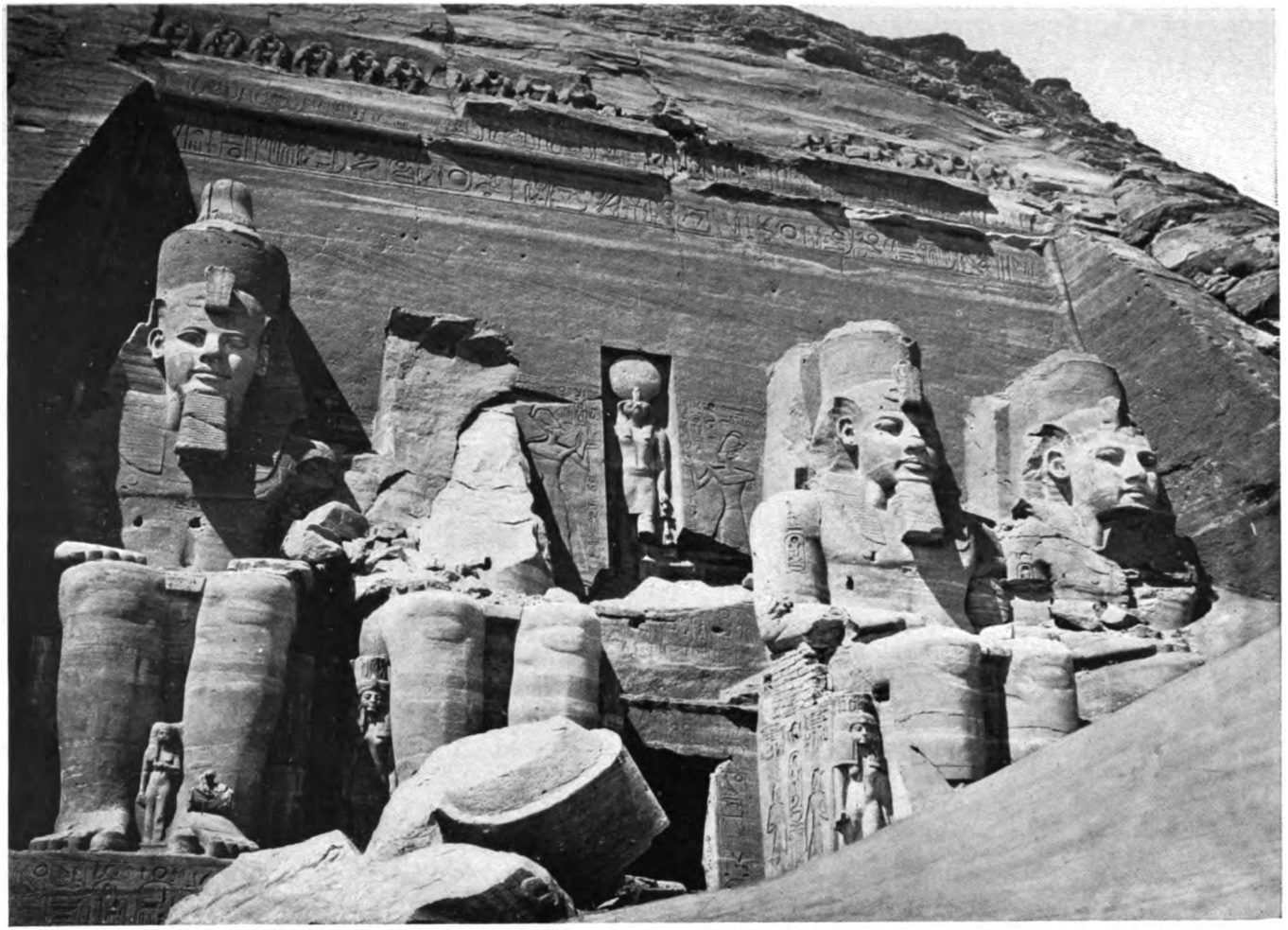


Fig. 28. Seated Figure Called "The Scribe," Louvre Museum.

Front of the rock-hewn temple at Abu-Simbel in Upper Egypt (Nubia), on the left bank of the Nile. The four colossal statues of King Ramses II. are all wrought in the solid sandstone of the hillside. The temple was discovered and cleaned of sand in 1817. *It is carried into the rock for* 150 *feet, with pillars reserved, as in a mine, and a number of side chambers.*



ABU-SIMBEL

STONE RELIEFS AT ENTRANCE OF ROCK TEMPLE

The forms of the body are treated throughout with intelligence (Fig. 30). The firm build of the whole, the meaning and movement of the limbs, are clearly comprehended. It was undoubtedly of importance, for the understanding of the human form, that the climatic and the custom of the country prescribed only scanty clothing; and even the fuller, richer drapery we so often meet with in the wall-paintings was formed of light, transparent material. Thus the contemplation of the human form must have made the artist sufficiently acquainted with it. The drapery, for the most part, is limited to only an apron. The hair is completely concealed by a cap, which, in the rulers, was combined with the simple or double crown, or a fantastic headdress composed of symbolic attributes. The beard,

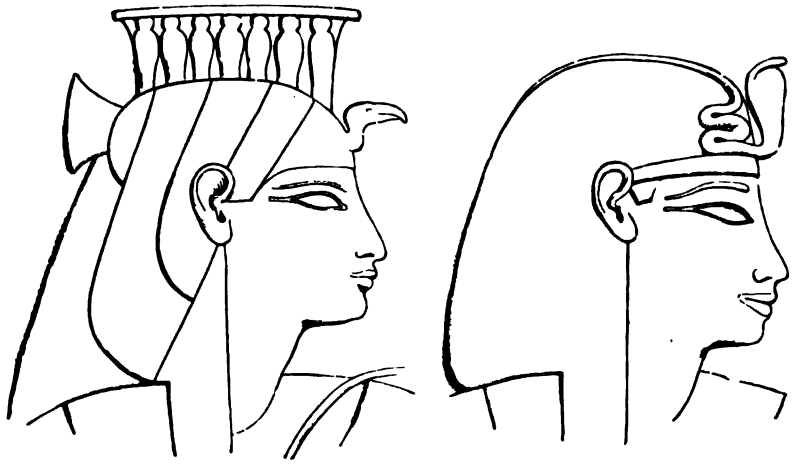


Fig. 29. Egyptian Heads in Relief.

also, was ingeniously wound round in a similar manner, and curiously bent into the form of a hook. Nevertheless, to put this knowledge into practice was allowed only under strict limitation; as, even in the earliest period, a fixed canon, of strict arithmetical proportions, was laid down for the forms of the body, and accurate adherence to this was enjoined by the law. This canon, it is true, was changed from time to time when greater slenderness of proportion was desired, or more realistic treatment was demanded. In spite of all these changes, which were in reality only the fluctuations of fashion due to foreign influences, we find the ancient canon adhered to through thousands of years, fettering all free movement, and closing the way to such highly wrought study of nature as the Greeks produced, beginning with the seventh century B.C. The part the sculptor played in the work was largely limited to the execution; and this,

from the general diffusion of skill, must have appeared merely a handicraft. With this are also connected the astonishing certainty and unwearied care with which the hardest materials, granite and basalt, are worked with the same minute accuracy in colossal works as in those of the smallest dimensions—an accuracy shown everywhere in the countless hieroglyphic writings on columns, pillars, obelisks, pedestals, walls, and sarcophagi. That Egyptian art chiefly symbolizes the greatness of the gods and god-descended rulers by colossal figures is to be explained partly by the equally colossal size of the buildings, and partly by a deficient intellectual life, which instinctively seeks to compensate by size for what it lacks in mean-

Fig. 30. Egyptian Wall-Paintings.

ing. Seated figures of the Pharaohs, statues placed against piers, and sculptured sphinxes and rams, from 20 to 30 feet high, are not unusual. The six standing figures on the façades of the smaller stone temple at Ipsambul measure 35 feet; the four sitting statues of the great Rhamses, in the principal temple there, are more than 60 feet high; Memnon, with its gigantic companions among the ruins of Medinet-Habu, is 70 feet high; and the famous Sphinx at the pyramids of Memphis has a length of 142 feet.

Colossal and numerous as these works of sculpture are, they are still far surpassed in extent by the boundless abundance of reliefs exhibited on all the walls of the temples, palaces, and tombs. In their infinite variety, embracing all forms of existence, in their ani-

mated and lifelike reality, they supply the deficiencies of the detached figures, and form, as it were, a reverse side to their solemn seriousness. Their object is mainly that of a chronicle-like and faithful historical narrative, a detailed account of the whole life of the Egyptians. Even in the earliest tombs of the old kingdom, which carry us back to about 3000 B.C., the simple labors of agriculture (Fig. 31) and cattle-breeding, the relations and affairs of a many-sided private life, are faithfully and fully depicted. The types, the mode of expression, the laws of plastic art, were already established, even in this early time, for this kind of representation, and were confirmed by long use. At a later period, on the gigantic walls of the

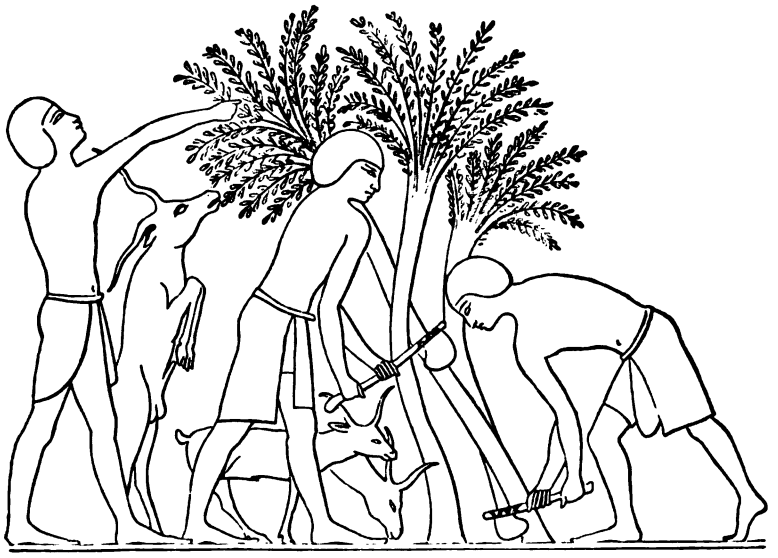


Fig. 31. Tomb Carving.

Theban monuments and of the other memorials of the golden age of the new kingdom, we see plainly represented, sometimes in the tombs, all the incidents of private life—work and employments of various kinds, recreations and games such as are still in practice among us, cheerful social doings and festive entertainments, as well as religious ceremonies, sacrifices, and other solemn acts, burials, and even the destiny of the soul; sometimes again, and this especially on the walls of temples and palaces, the events in the life of the ruler: solemn political acts and animated hunts; peaceful incidents and warlike enterprises; mighty hosts, in which the king, colossal in height, and towering above everything else, taller than men and cities, rushes along in his battle chariot over the bodies of his fallen foes (Fig.

32), laying low whole armies with his weapon; or in sea encounters sinking fleets of vessels full of armed men, and then at length seizing a kneeling people by their common hair, and hurling his battle-ax for the fatal stroke. Again, we meet with troops of conquered enemies, arranged in rows over each other, and brought before the enthroned despot to render humble homage; and in these reliefs the various races are clearly distinguished from one another by the way in which the characteristic physiognomy and dress of each are given. In all these representations, an accurate and chronicle-like report, an intelligible record of facts, is the only thing aimed at; only in the fact that the form of the king surpasses all others in size may even a trace of symbolism be perceived. But this, too, is another evi-

Fig. 32. Relief at Karnak. Sethos I.

dence of how Egyptian art, wherever it attempts to express intellectual preëminence, is compelled to have recourse to conventionally symbolic and purely external means.

That a deeper spiritual principle is lacking in Egyptian art, as in all Oriental art, is perceived also in the arrangement of these works. There is no idea of a composition in a high sense. The scenes are either arranged one over another in monotonous repetition, or, in more animated incidents, there is a confused jumble of figures. That in some instances regard is paid to the allotted space, and that the action delineated is often with great skill adapted to this space, is a matter of course in such an extensive exercise of the art; but generally the representations cover the vast surface without any architectural principle of arrangement; and everywhere an unimaginative naturalism prevails, which hardly recognizes a higher law of ar-

rangement. But in another respect, also, the animated representations of life do not rise beyond the level of those severe and solemn statues already described. The passive repose of the latter arises, in truth, from the want of individual and intellectual life; the varied action of the former never goes beyond a merely bodily activity. No special intellectual principle, no life of thought, is expressed in their countenances. They cannot tell us anything which goes beyond the sphere of simple practical doings; and thus nothing but the fixed monotony of Oriental manners is recorded even in their most lively action. Hence, while in the course of centuries they portray for us all the manifold changes that took place in the life of the nation in spite of its stability, they show us no progress in thought, nor in artistic feeling. Although the sculptured story may become richer and more animated; although, after the zenith of prosperity reached by the new kingdom, a decline of power is evident, and a weaker expression is perceptible, and again, under the new *régime*, a fresher life makes its way, and this also gradually again degenerates; still, all these cannot be regarded, in a deeper sense, as phases in the development of art; for such only occur when new ideas struggle into light in new modes of expression.

This leads us to the technical treatment of Egyptian sculpture in relief. This is of two kinds: first, bas-relief in the ordinary sense, as on a modern coin, where the background is lowered over all its extent, leaving the head or figure in projection; and, second, what is called concavo-convex * relief—that in which there is no background, but the relief fills a panel or depression exactly as large as itself. In the second class of work the figure desired appears outlined by a trench or groove, while within this groove the modeling of the head or body may be as elaborate and refined as in ordinary bas-relief. All of these sculptures are elaborately painted in brilliant colors; red, blue, green, yellow, and black are used as pure as the pigments allow.

It appears that three systems of representation are used side by side, the more laborious and costly work for the more important monument or for the less extended wall-space. These three methods are painted bas-relief, painted concavo-convex relief, and paintings on the flat surface of the wall. The preservation of the splendid colors, owing to their solid preparation and the favorable climate, is especially remarkable.

This flatness of relief is connected with other peculiarities of representation, which are adhered to as types through all the epochs

*Called also Koilanaglyphic (Coelanoglyphic) sculpture and cavo-relievo and intaglio relevato.

of Egyptian art. The figures, for instance, are portrayed with breast and arms turned frontways, and with the feet and head in profile (Fig. 33). That this mode of position gave the figures a somewhat twisted appearance cannot have escaped the Egyptians, with their keen observation of nature; and, indeed, instances are not lacking, in which, although with small result, the attempt has been made consistently to carry out the profile position. The attempts at realistic freedom of pose and gesture are commonly seen in the inferior personages of the scene; and in like manner for beasts and

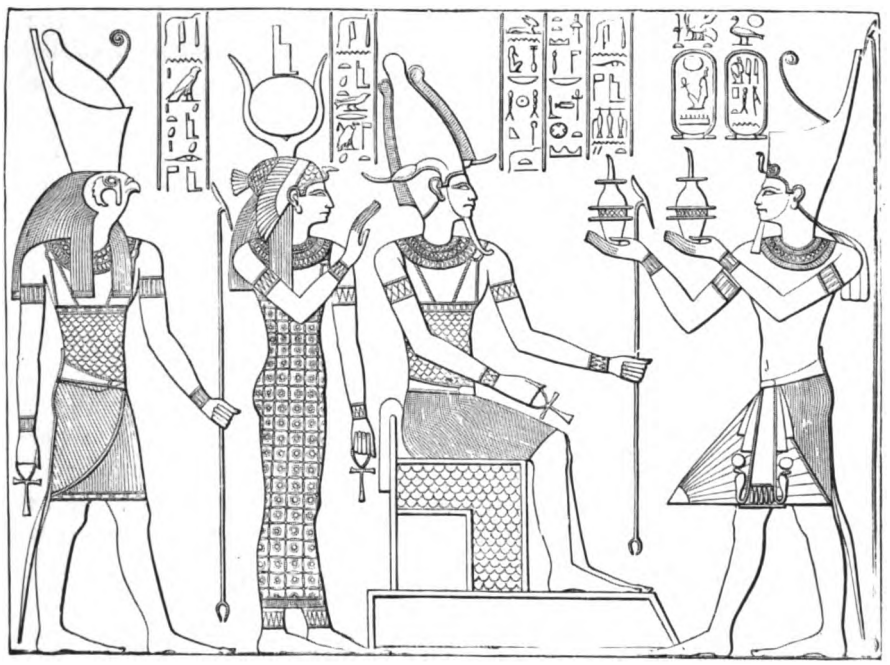


Fig. 33. Sethos I., with Osiris, Isis, and Horus.

birds. The sovereign or the master or mistress will be found, in work of the later empire, treated with all traditional severity; while the attendants and children will be shown in varied attitudes, and even turning their backs to the spectator. In fact, it was the slight depth of the relief which led to this conventional position, as, in such limited space, the perspective foreshortening of the separate parts could not easily be accomplished by the resources of their art. How this manner of representing the figure was introduced into the art of Central Asia, we shall see later.

Wall-painting was employed alone to a great extent in many

places, and especially, it would appear, in the rock-cut tombs. Thus, the tombs of Beni-Hassan are adorned with numerous paintings relating to private life, and the royal tombs at Thebes are decorated with the most circumstantial details of every kind. The conception and style of these works call to mind the treatment of the relief-sculpture, although the feeling for modeling and rounding of forms appears still weaker in them than in the reliefs. The strong and decided outlines are simply filled with the necessary local color, without an attempt at modeling by finer toning or shading. Here, too, we find the style most closely fettered; and, during the whole duration of Egyptian art, no higher stage of development is attained.

It is to be noted, however, that as decoration all this mural sculpture and mural painting is faultless. From the work of the

Fig. 34. Subject from "The Book of the Dead."

fourth dynasty, where the solid granite of a sarcophagus is cut into a surface representation of framing and lattice-work of wood, to the elaborate scenes of war and chase and the quiet landscape of later time, all has a strictly decorative purpose. The Egyptians would never have admired a semblance of reality, which would have gone far, as in much modern work, to defeat its ornamental purpose. A similar mode of treatment is shown in the paintings with which the papyrus rolls of the so-called " Book of the Dead " are ornamented, of which rolls the Museum of Turin possesses a fine example. In it was portrayed the fate of the soul after death, and it was put into the grave with the dead person. Here, also, are many genre scenes from daily life, described with such a bright distinctness that they constitute, perhaps, the most charming side of Egyptian art (Fig. 34).

While we have learned to regard the whole wide circle of human

affairs, and the events of public and private life, as the peculiar field of sculpture among the Egyptians, there is, on the other hand, no lack of representations of a symbolic religious purport. In order to distinguish the different gods of the country, recourse is had to outward symbols; the gods, fashioned in human form, bear the heads of animals, which serve at the same time as the hieroglyphic sign of their names (Fig. 35). Thus Thot receives the head of the ibis; Rhe, that of the hawk; Anubis is represented with a dog's head, and Ammon with a ram's; among the goddesses, Hathor bears the head of a cow, and Neith that of a lioness. The decorative scheme hardly allowed for the embodiment of ideas, and for expressing them

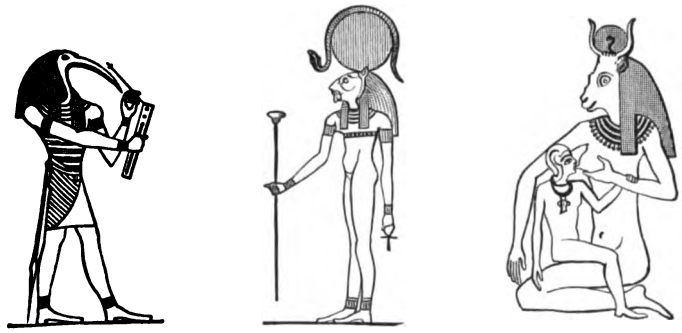


Fig. 35. Representations of Egyptian Divinities.

in the form of an individual character. It is to be noted, also, that the loftier art would not be as quickly and easily legible. Hermes cannot be told from Apollo but by his caduceus or his winged sandals; but the hawk-headed being is always Rhe. Although the combination of such heterogeneous elements, considered from a purely external point of view, is not accomplished without skill and understanding of form, still the important fact remains, that in the representation of the idea of deity, the lower animal forms are employed to represent the seat of the higher mental faculties. More agreeable is that riddle of the sphinx, familiar to Egyptian art, in which a lion's body is added to a human head or the head of a ram—a creation the grand character and mystically significant effect of which cannot be denied.

Chapter III.

THE ART OF CENTRAL ASIA.

*A.—Babylon and Nineveh.**

WESTWARD from the Indus there stretches a vast extent of country, which, in the earliest ages, formed the central point of an important civilization. In contrast to the other regions of Asia, the overwhelming redundancy of nature here appears moderated. There is no lack, indeed, of fruitful districts, but between them extend inhospitable desert wastes; and man, instead of being surrounded with a luxuriously productive nature, is impelled to active exertion in order to bring under subjection the opposing powers of nature. The position of these vast regions, which extend from the Indus to the Euphrates, has, from the earliest ages, brought their people into constant contact; and as the climatic conditions from a very early period induced a spirit of energy, and made possible a mode of life of their own, an historical life, full of rapid change, and rich in exciting catastrophes, was developed; the supreme dominion over these lands connected by nature, passing sometimes to one and sometimes to another of the races, settled there.

The oldest seat of culture in these regions is to be found in Mesopotamia, the land lying between the Euphrates and the Tigris. Here also, as in Egypt, the progress of civilization was affected by mighty streams, which, in spite of certain differences, still present many analogies with those of the Nile Valley. As the Euphrates flows in a far higher bed, and is more rich in waters, than the deeper-lying and arrow-like Tigris, the whole level land is exposed to inundations in the spring, when the snows melt on the mountains of Armenia. These inundations early led the ingenious people to construct magnificent dams and dikes, and a system of canals. While man was thus

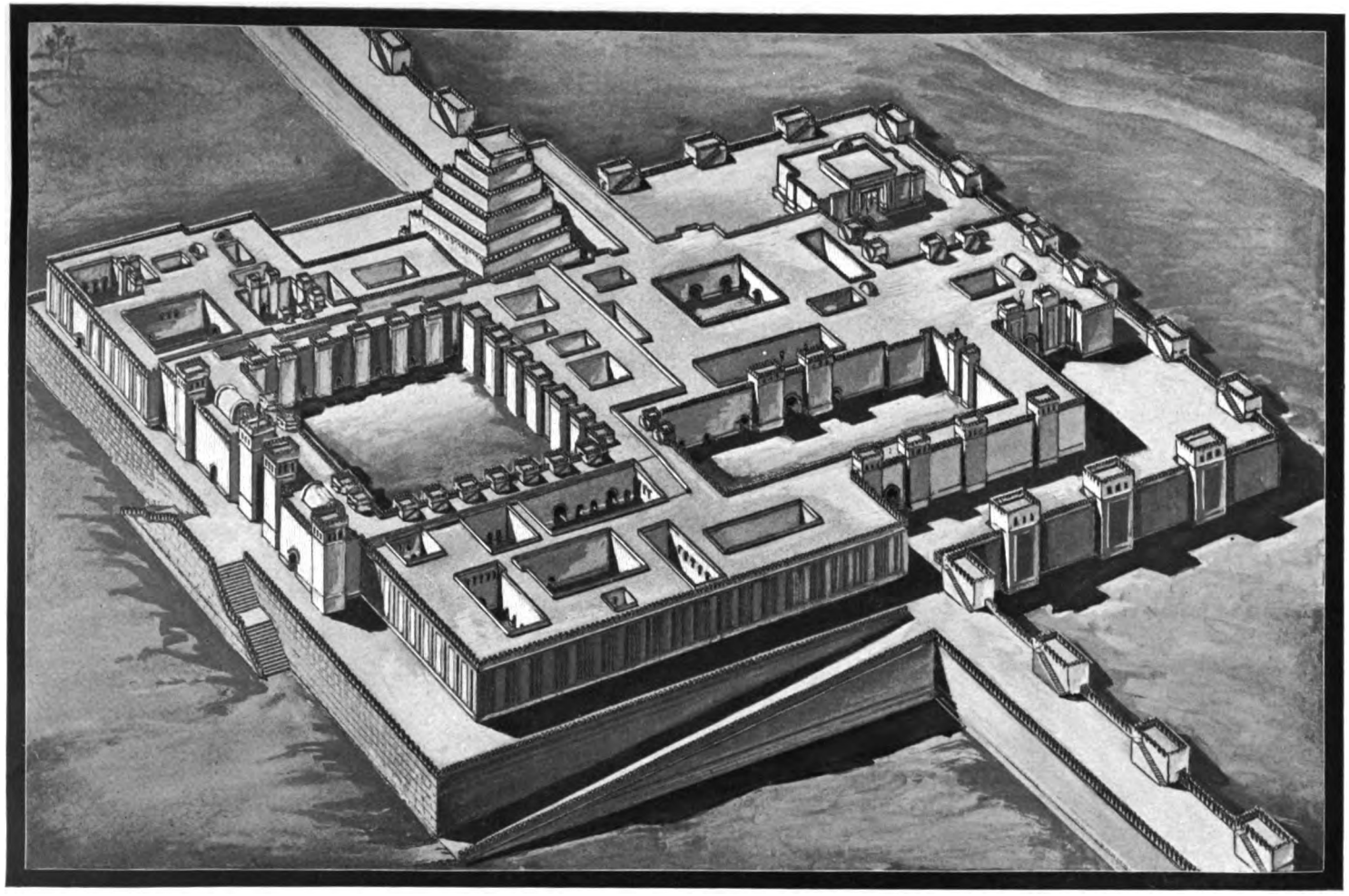
* Botta and Flaudin, "Monuments de Ninive"; Paris, 1849. Layard, "The Monuments of Nineveh"; "Nineveh and Its Remains"; "Nineveh and Babylon"; London, 1853. Perrot and Chipiez, "Histoire de l'art dans l'Antiquité," vol. ii. Place, V., "Ninive et l'Assyrie."

compelled to rule the powers of nature and to render them serviceable, in order that he might gain from them the conditions for a prosperous existence, the impulse for trade was awakened, the activity of the intellect was promoted, and a strong and energetic spirit was developed. Under these influences, far back in time, powerful kingdoms with mighty capitals, with a highly advanced civilization and extensive commerce, rose on the banks of the Euphrates. Even the books of the Old Testament sketch in grandly terse, impressive touches an image of the power and splendor of ancient Babylon, whose fabulous tower conveys a notion of gigantic undertakings, imposing even to the nations of that period. The religion of these people seems, in harmony with these works, to have been practical and sensible, rather than fantastic or poetic; and interests of temporal power and material gain were those which preponderated most in their partly warlike and partly commercial character.

The ancients, in their descriptions of the buildings of Babylon, tell of works of colossal extent, and of grand simplicity of design; among them the Temple of Baal, which, pyramidal in form, rose in eight graduated stories upon a base six hundred feet square, surpassing even the giant pyramids of Egypt. Similar in grandeur of structure were the walls surrounding the immense city, and the two royal palaces, and the famous wonder of the hanging gardens of Semiramis. Nothing is left of these mighty monuments except shapeless heaps of rubbish, covered in spring with luxuriant vegetation, which mark, in the neighborhood of the village Hillah, or Hilleh, on both sides of the Euphrates, the place where once stood the proud mistress of the nations. This state of things is to be explained by the material which the Babylonians were obliged to use, owing to the utter lack of stone in a land formed by alluvial deposit. All buildings were made of tiles which had been dried in the sun, bitumen serving as mortar. The mighty elevation of Birs-i-Nimrud (which is supposed to be the Temple of Belus), that of Mudjelibe, and the so-called El Kasr (which appears to be identical with the new palace of Nebuchadnezzar), are the most important remains. The marks upon all the brick-work discovered refer to this king, and therefore indicate the period about 600 B.C. Among works of sculpture a colossal granite lion has been discovered, which was probably placed as a guard at one of the portals.

The remains of a terrace pyramid which are to be found at Mugeir (Magir or Mugajir), in the lower Euphrates district, appear to belong to a more remote antiquity. They form a parallelogram of 133 by 198 feet; and the interior substance, of sun-dried tiles, was covered with a facing of brick, which, with its slightly projecting pil-

Palace of Sargon, King of Assyria (722-705), *at Khorsabad, near Mosul on the Tigris. Conjectural restoration. The building was situated on a flat plain or great platform, surrounded by a battlemented wall and protected by towers, surmounted by the buildings of the palaces and by the great temple seen at the top of the picture. Unburned bricks compose the mass of the structures, but they are generally protected by retaining walls of hard or baked brick.*



ASSYRIAN ARCHITECTURE

PALACE OF SARGON—RESTORATION

lars, had a kind of architectural construction. These ruins are regarded as the remains of a temple in the primeval city of Ur, or Hur, which was said to have been founded about 2200 B.C. by King Uruk; but it is not thought that any buildings now traceable have any such antiquity as that. Still more important are the ruins of an oblong, palace-like building at Wurka, forty miles south of Bagdad, since they afford an instance of apparently very ancient wall decoration.

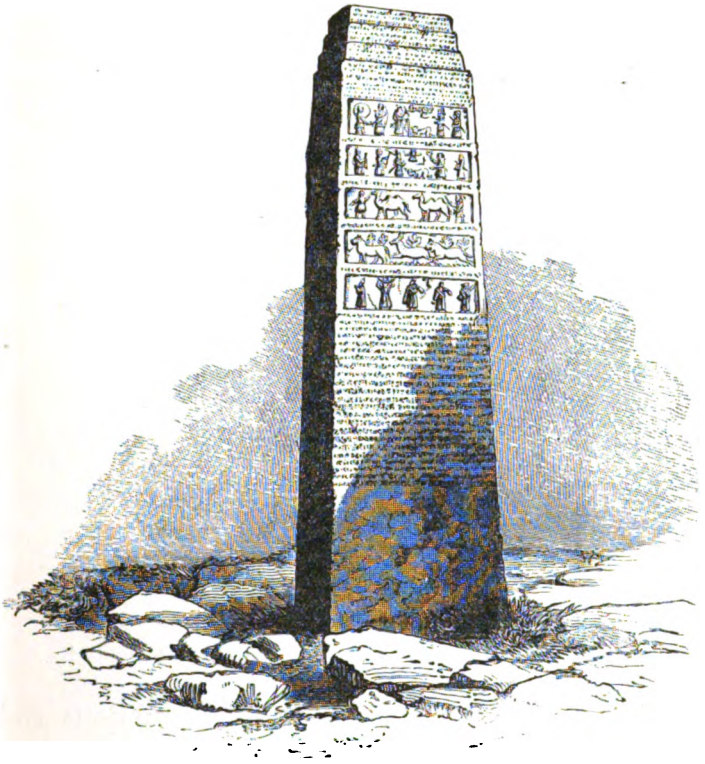


Fig. 36. Obelisk of Divanubars.

Small wedges of burnt clay are pressed upon the plaster; and these, by being glazed over with various colors, form a tapestry-like pattern. Thus the famous tapestry-weaving of Babylon became a model for architectural wall decoration.

The English traveler Loftus discovered the ruins of a very ancient temple northwest of Ur, on the left bank of the Euphrates, at what is to-day Senkereh, the ancient Larsam (Elassar). Another ruin of Abu Sharein has been proven to be Eridu, the most southern of Chaldæic cities. It is a structure surrounded like a fortress by

high walls, and occupying a high plateau upon which arose a terraced pyramid; the highest platform bore a temple which was approached by a marble staircase. Among the ruin-hills of Abu-habba, situated southwest of Bagdad, the scholar Rassam discovered ruins of the ancient city of Sippar, notably a palace of extraordinary dimensions—about 1600 feet long.

More important remains have been brought to light in recent times by the excavations at Mosul, on the upper Tigris. Heaps of remains of similar material stretch along the eastern bank of the river for about ten miles (see Fig. 36, the black marble obelisk discovered by Layard, and now in the British Museum); and these are ascertained to be the ruins of Nineveh,* the capital of the kingdom of Assyria.

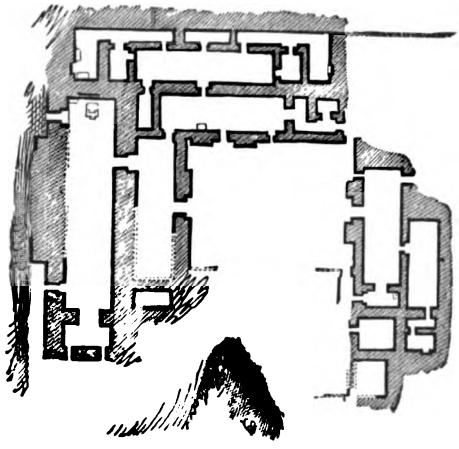


Fig. 37. Ground Plan of the Northwest Palace of Nimrud.

The excavations, first undertaken by the French consul Botta, and then by Layard, have revealed the design and artistic decoration of mighty buildings, most of which belong to the second kingdom (ninth and eighth centuries B.C.). They are all raised on terraces faced with brick and thirty or forty feet high, and crowned with stone parapets. The buildings are placed on the vast platform, arranged in an intricate and apparently irregular manner around an open court. They are, for the most part, long, narrow, corridor-like apartments and halls; the principal apartment being sometimes 150 feet long by only 30 or 40 feet

* Botta et Flaudin, "Monuments de Ninive." Layard, "The Monuments of Nineveh"; "Nineveh and Its Remains: A Popular Account of Discoveries of Nineveh, Fresh Discoveries, etc."; London, 1853. Vaux, "Nineveh and Persepolis." G. Rawlinson, "The Five Great Monarchies of the Ancient Eastern World." Place V., "Ninive et l'Assyrie, avec des Essais de Restauration," par F. Thomas.

wide, inclosed with walls of excessive thickness (Fig. 37). Few traces are to be found of the way in which the apartments were roofed; and there are equally few remains of independent supports, such as columns or pillars. Lately, however, M. Place, who succeeded M. Botta as French consul at Mosul, in the course of his thorough researches at Khorsabad has uncovered the remains of the vaulting, by which it is proved that some of the rooms were roofed with barrel vaults, and others with domes. It is thought that most of this vaulting was done in crude brick. With all this elaboration of structure there seems to

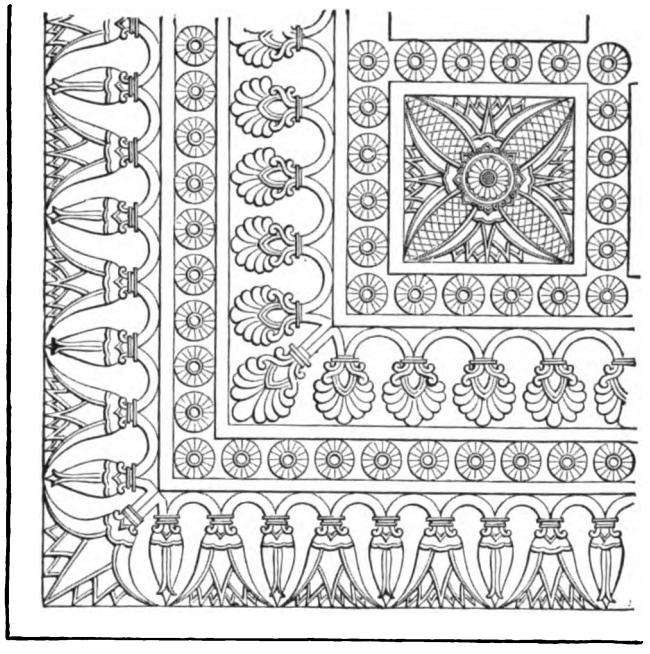


Fig. 38. Ornament at Kujjundjik.

be a want of organic growth of design; for we do not meet with any example of a strictly architectural subdivision of the masses. On the contrary, the Assyrians conceived their wall surfaces as vast tapestries, and covered them accordingly with a number of representations in relief. These sculptures are executed upon thick alabaster slabs, measuring as much as twelve feet square; and these slabs are then fastened on the walls in several rows, one above another.* The space between this sculptured wainscoting and the ceiling was often decorated with glazed and baked tiles of earthenware, ornamented

* Specimens are in the Louvre, the British Museum, and several belong to the New York Historical Society.

with various designs. The floor also was paved with similar tiles; and it is in the ornamentation of these that the decorative fancy of the Assyrians strikes out in a direction of its own (Fig. 38). There

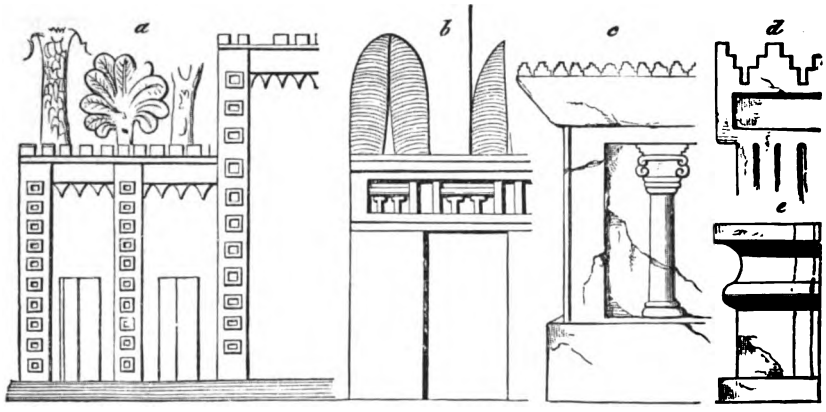


Fig. 39. Details from Assyrian Palaces.

is often a highly elegant and tasteful arrangement of forms, the motive of which was evidently the close imitation of an ancient and highly developed art of weaving. Purely vegetable forms—palm-

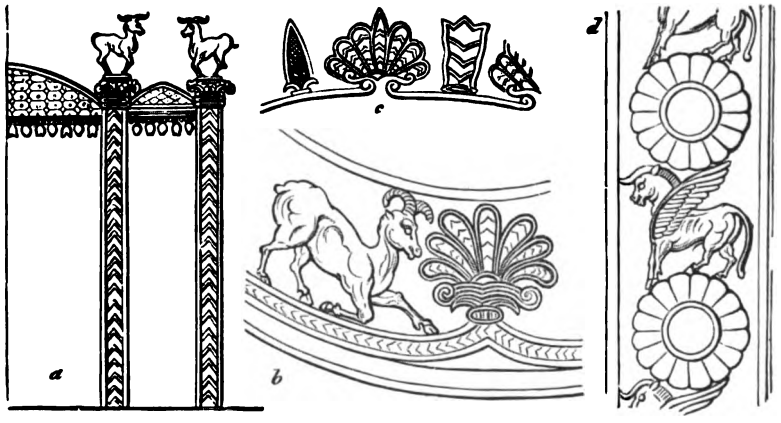


Fig. 40. Details from Assyrian Palaces.

leaves, open and closed lotus-blossoms—form the most important element of this decoration. As for the way in which the upper portion of their buildings was constructed, a hint is furnished by certain bas-reliefs that remain, in which we see buildings rising

terrace-like in several stories, each story being furnished with a gallery, opening with small colonnades (Fig. 39, *b*). The columns have a remarkable form of capital, in which two pairs of volutes, the one above the other (cf. Fig. 39, *c*), are the main element. A great increase of effect is produced at the portals, which are guarded at each side by gigantic winged bulls having human heads. The gates themselves were, according to ancient records, formed of brass; which, in connection with other allusions to golden images of gods, altars, and the like, leads us to infer a predilection for the use of brilliant metals, and the technical skill resulting from their frequent employment.

We have no idea of the external appearance of these buildings

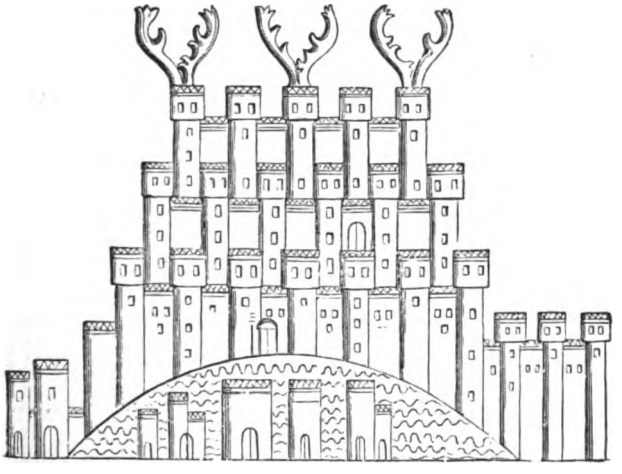


Fig. 41. Fortress, from an Assyrian Relief.

except by the conjectural restorations of Chipiez* and others. Rising high above the alluvial plain on lofty terraces, they obtain light and air through openings which M. Place has shown to have been left in the vaulting, often like the lunettes of Italian vaulted buildings of the sixteenth century, but left entirely open, and generally turned toward the north.

Fig. 39, *e*, affords a view of the granite breast-wall of the platform of the palace at Khorsabad, with its deeply fluted cornice. The surfaces of the walls in a suite of apartments of the lower story of this palace are either smooth, or broken by decorated pilasters and hollowed vertical stripes (Fig. 39, *a*, and Fig. 43). The whole is frequently finished with battlements, which are sometimes cut in a

* Perrot and Chipiez, "Histoire de l'Art dans l'Antiquité."

step-like form (Fig. 39, *c, d*). That the flat roofs of the building often contained small pleasure-grounds, with plantations of palms and cedars, may be gathered from many sculptures, such as Fig. 39, *a, b*. We are involuntarily reminded by them of what the ancients tell us of the "hanging gardens" of Semiramis. The columns met with on these reliefs are, as a rule, limited to a small number; for free supports have been nowhere discovered in the large apartments. The base of the columns consists of a circular torus, sometimes resting on the back of the figure of an advancing lion. The capitals are not confined to the volute form, but they sometimes vary with the more slender calyx form, covered with upright leaves. Fig. 40 gives us some examples of Assyrian treatment of ornament, which is seen to be very marked in style. It con-

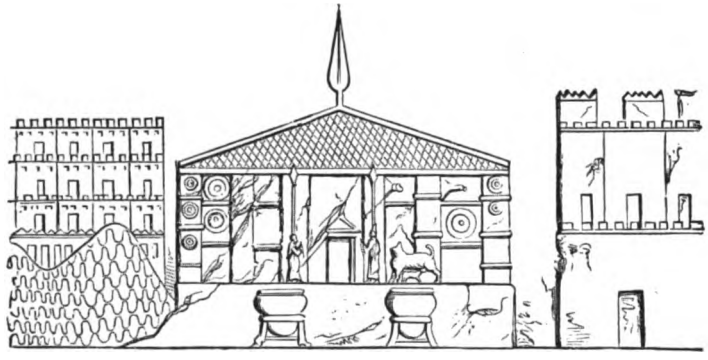


Fig. 42. Representation of an Assyrian Temple.

tains, at *a*, a representation in relief of a tent-like building, the light tent-roof of which is supported on slender and probably wooden posts with volute capitals.

That the arch was already known to the Assyrians is proved both by representations in the reliefs and by remains actually discovered. But this form of construction is not known to have been employed for covering over larger spaces. Brick arches of six feet span have been discovered in the drains beneath the palaces of Nimrud, and these are generally pointed arches. In order to form these vaults, the separate solids are accurately shaped in a wedge-like form. In the reliefs we often meet with arched portals, especially in buildings designed for fortification (Fig. 41). Through the discoveries of the French consul, M. Place, these bas-reliefs have recently been verified by the monuments themselves; for he found at Khorsabad several of the city gates, consisting of round-arched entrances from twelve to fifteen feet wide. The archivolt is ornamented, tapestry-like, with

blue glazed tiles and yellow reliefs, and rests on piers from which project figures of gigantic winged bulls with human heads.

We possess no representation of the temple buildings of the Assyrians; although small, chapel-like shrines, with a porch supported by columns, appear repeatedly on the reliefs.

Temples with gabled roofs were also known to the Assyrians, with façades ornamented with curious, horizontally divided pilasters decorated with suspended shields. The pediment is covered over with a tapestry-like pattern thoroughly in the style of Babylonian-

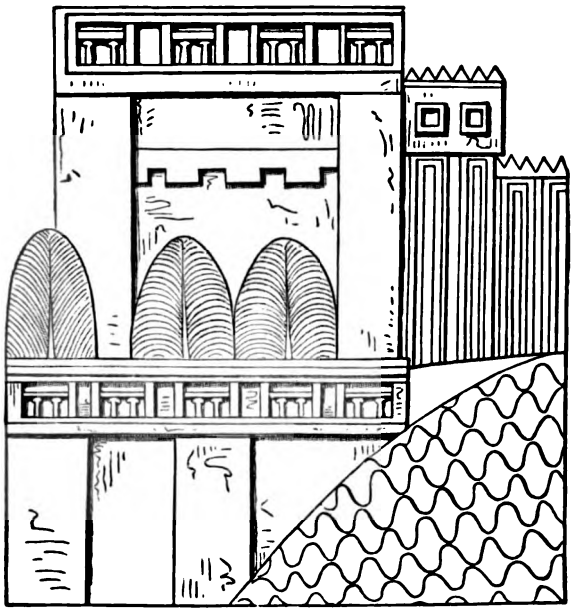


Fig. 43. Relief at Kouyunjik.

Assyrian art (see Fig. 42). The gable is crowned with an ornament in the form of a lance-head. In front of the temple stand two caldrons on feet, which recall to mind the vessels for purification in the temple at Jerusalem.

The main group of buildings at present known are those found under the mound called Nimrud, where many grand edifices, designated as the northwest, southwest, and central palaces, are to be found close together. Farther up the river stands the palace of Kouyunjik, and still farther north that of Khorsabad; these names being the local names of modern villages or of the great shapeless mounds themselves. That whole ranges of buildings must have been standing before the destruction of Nineveh, which took place in the

year 606 B.C., by the united powers of Babylon and Media, is self-evident. The oldest building is the northwest palace of Nimrud, the inscriptions on which bear the royal name of Sardanapalus; not the well-known king of that name, but one of an earlier date. The palace was probably erected in the ninth, if not in the tenth century

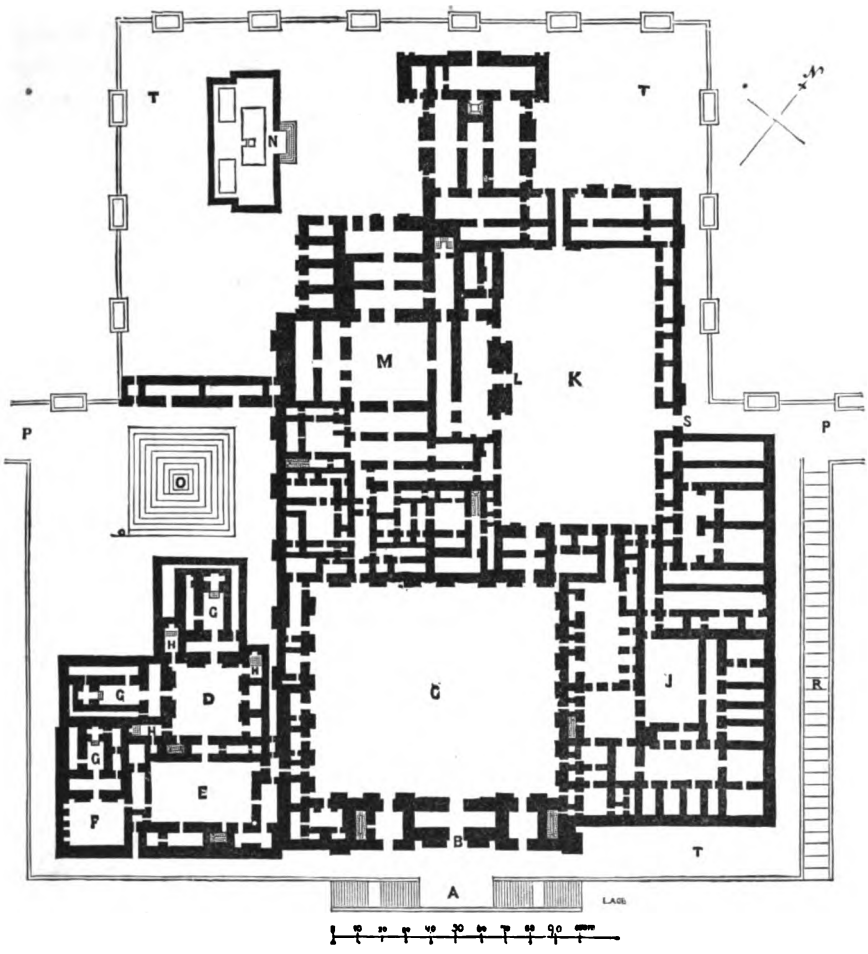


Fig. 44. Plan of the Palace of Khorsabad.

B.C. The central palace was founded by Temenbar, the son of Sardanapalus. In the eighth century a new dynasty began; and King Salmanasar built the palace of Khorsabad; his successor, Sanherib, that of Kouyunjik; and his son Esarhaddon, the southwest palace of Nimrud. In this building epoch, comprising about five hundred years, the aim of Assyrian art seems, both in general and in detail,

to have remained essentially the same, without betraying a germ of higher advance or of organic development; and it is only in the style of the plastic decorations that we perceive certain modifications to have taken place in their mode of work, in spite of a strictly circumscribed circle of ideas.

The complete plan of an Assyrian palace has been for the first time set before us by means of the uncovering of Khorsabad by M. Place (Fig. 44). The vast structure, with its separate rooms, halls, and galleries—about two hundred and ten in number, and grouped

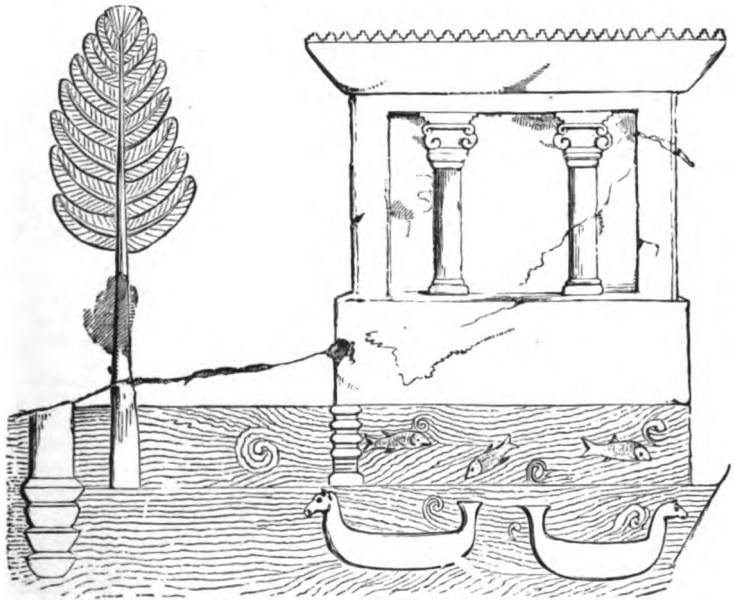


Fig. 45. Pavilion, from the Sculptures at Khorsabad.

around thirty courts—was built upon an artificial terrace, the cubic contents of which are reckoned at a million and a half of meters. We can now clearly trace the plan of the palace proper, with its harem or women's quarter, at once closely connected with it and yet strictly secluded, and with its multitude of out-buildings and offices. The palace was approached by two open flights of steps and a ramp for horsemen and chariots. Through the main portal the great court-yard was entered, which was inclosed on the left by the harem, on the right by the out-buildings, offices, stores, and stables, and in the rear by the palace proper. The latter, with its long, splendid galleries, was reached by passing across the court and thence through a portal which leads to a suite of large rooms. Its stately entrances

are adorned with colossal bulls, and each of the principal rooms has its walls wainscoted with slabs of stone carved in relief; while others—the sleeping rooms, for example—are decorated with wall-painting.

At each of the three portals of the harem were placed two male statues, like guardians as it were. More curious yet was the decoration of the main portal, consisting of two palm-trees sheathed with gilded scales of bronze, which, with the statues and the colored enamel slabs covering the walls of the harem court, must have produced a brilliant effect (Fig. 45). The palm-trees recall to

Fig. 46. Figures of Assyrian Rulers.

mind the golden plane-tree and vine, works of Theodores of Samos, under which the Persian kings used to sit enthroned.

Near the palace, upon a four-square platform, there rose a pyramid in seven diminishing stages, of which only the lower four, each twenty feet in height, remain. The summit of the pyramid probably bore an altar, and perhaps served as an observatory for the astrologers. Another building standing by itself has also been discovered, which may have been either a temple or a hall of audience. Near this huge monument the site of a city has been found, the mighty walls of which were pierced with seven gates—again the sacred number. The gates are arched with semicircular arches, and decorated with bricks enameled in bright colors. The inscriptions state that Sargon (721-702 B.C.) was the builder both of the city and of the palace.

With regard to the sculpture of these nations, rich material lies before us from the different epochs of Assyrian art, especially in the numerous reliefs come to light among the ruins of Nimrud, Khor-

Fig. 47. Bas-Relief. Assyrian Court Officials.

sabad, and Kouyunjik. Numerous examples of the sculptures of Nimrod and Kouyunjik are in London, in the British Museum; and those of Khorsabad in Paris, in the Museum of the Louvre. These remains consist, for the most part, of reliefs; and only with rare

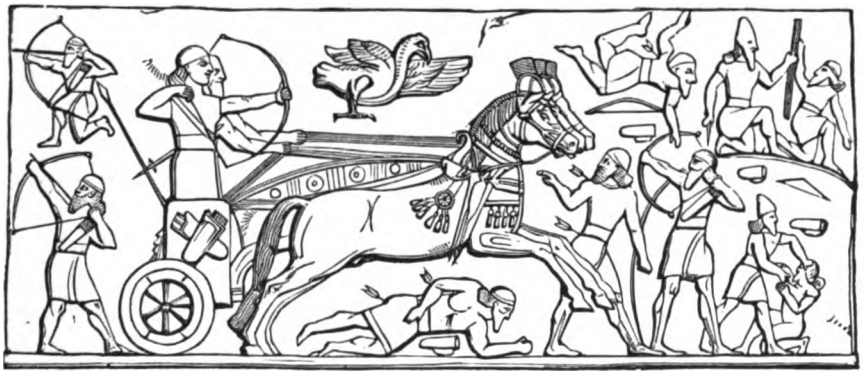


Fig. 48. Relief from Nimrud.

exceptions does sculpture seem to have advanced to statuary. Here, also, as among the Egyptians, the plastic arts are chiefly applied to the delineation of actual life. In harmony with the purpose of the chambers to be decorated, representations of the life and deeds of

the rulers predominate. There is no attempt at the expression of thought or feeling; their only aim is the chronicle-like representation of the simple events of every-day life. We see the king, in the heavy, richly adorned dress of the country (Fig. 46), with long, closely fitting garments, on his head the royal tiara, slowly moving along, or enthroned on some tastefully ornamented seat, surrounded by a numerous retinue (Fig. 47). Solemn seriousness and stately dignity characterize all these scenes. Other and more animated representations of the chase and war alternate with these. On his light chariot the king, accompanied by his charioteer, is hunting, at one time a pair of lions, at another two bulls. While one animal falls bleeding under the horses' hoofs, the other, furious with rage, attacks his pursuer in the back, who, quickly turning round, aims at him the fatal weapon. In another place we see warlike undertakings (Fig. 48); castles besieged and destroyed with mighty battering rams; fording of rivers, in which the king and his chariot are transported across on a ferry; and warriors and horses, the former aided by floating bladders, are endeavoring to reach the opposite shore. All these incidents are depicted with great life, distinctness, and fidelity. We perceive everywhere a clear intelligence aiming at the simple grasping of the reality. The arrangement, too, although frequently recurring —the same composition being always repeated for the same subject—often exhibits surprising traits of natural life and keen observation. With this strong feeling for reality we find combined a distinct perfection of form. The sculpturesque style of the relief appears already freely and independently developed, exhibiting just gradations; the forms are firmly and distinctly designed; the figures stout, and inclined to Oriental obesity; the countenance has the characteristic traits of the Semitic race—the strongly curved nose, the large eye with its expressive arched brow, voluptuous lips, and full chin, generally, in the men, enveloped in a long beard, which, like the hair, expresses the natural curl by uniform rows of conventionally arranged ringlets (Fig. 49). In the lions and bulls the hair of the mane and the tuft of the tail are executed in a similar conventional manner; while in all other things the animals are conceived with unusual life and naturalness, and exhibit a clear understanding of form. The naturalness of these works, the uniform execution, the intelligent, clear mind of which they give evidence, call forth a lively interest, both for the manner in which they ex-

Fig. 49. Assyrian Head.

tricated themselves from the ban of conventional laws, and in the ingenuousness with which they accommodated themselves to them.

Just as clearly are symbolic conventional influences seen to prevail in certain figures which pertain to the mythological ideas of the Assyrians. These appear principally to be priestly figures, to which, by the addition of a mighty pair of wings, and sometimes of an eagle's head instead of the human one, a character of mysterious and imposing dignity is given. Still more solemn and significant is the effect of the colossal figures, twelve feet high, which flank the gates, where, on the contrary, we find a bearded human head placed upon an animal's body, with bull's feet, a bull's body, and mighty wings (Fig. 51). These strange creations, which stand out in strong relief on both sides of the portals, are carved in the huge mass which forms the impost on each side, and so advanced that the human

Fig. 50. Sacred Symbolic Tree of the Assyrians.

head is clear of the wall, while the body tells rather as a high relief on the jamb and also on the face of the wall, prove at the same time how thoroughly an intelligent reflection goes hand in hand with this fantastic symbolism. Each of these wonderful animals has, for instance, three forelegs—so that, whether seen from the side or from the front, two forelegs may be seen. We may impute it to considerations of a similar kind, that, in hunting or in battle scenes (cf. 48), the string of the bow is not brought across the face of the archer, as truth to nature would require, but behind it. In all these singular contradictions of the actual facts are seen the traditional, severe, systematized character of the art of Assyria. It does not imitate nature, nor even try to give a close copy of any one form, but seeks descriptive representation combined always with decorative effect.

Most of the reliefs are executed in delicate white alabaster, some

of them in a brilliant yellow limestone; and, as is to be seen from many traces left, they were painted in strong colors. It appears, however, that color was not applied with the freedom of the Egyptian work. The brilliant enameled tiles were in full color; but the carved reliefs in yellowish-gray stone were only colored in part.

If no marked progress can be seen during the continuance of the Assyrian Empire, as far as known to us in art—a space of about two centuries—this is largely because of the unchanging nature of the government and of the population. Changes in literature and art are so very slow that when the whole mass of the work of two centuries in any Oriental country is looked at from a modern standpoint, and, therefore, in one plane as it were, without the possibility of separating the stages of growth except by patient study, it seems indeed all one style together. In sculpture, however, the Assyrians could never approach the lifelike force of the Egyptians because

Fig. 51. Portal at Khorsabad.

it was not their custom to study the nude with any persistency. In the Egyptian bas-reliefs is seen a race wearing but little clothing and with the details of the form most carefully studied in the sculpture. Even when figures are draped from head to foot, it is evident that the drapery has been of the thinnest and most translucent stuff, for the forms are shown beneath it with almost complete freedom.

No essential progress is to be remarked in the works of different epochs. As the sphere of representation was established from the beginning, and ever continued unchanged in the national mind, so is it also with the character of their treatment of form. Greater power and rudeness, especially to be seen in the strong marking of the muscles, is all that distinguishes the earlier works—those, for instance, of the northwest palace at Nimrud—from the softer, smoother, but also weaker productions of a later period. Still, in the

later reliefs at Kouyunjik, we perceive an attempt to enrich the simple sphere of representations by variety of life and greater animation in the delineation. In this direction, certainly, we cannot deny that a certain progress may be observed in the plastic art of Assyria, even though it never reached such lofty and serene power in fine art as that of Egypt. It was and remained an admirable method of appliance of decoration. Similar remarks are suggested by the little

Fig. 52. Assyrian Wall-Painting: Enameled Tiles.

that has been discovered of painting. The reliefs, bearing rich ornament in color, would produce an effect much like that of mural painting, and the result is closely similar to that seen in Egyptian art. As in the Assyrian system of architectural wall covering, the artistic mural decoration is chiefly composed of glazed tiles in color. Beyond yellow, blue, green, and black as dominant tones, these enameled tiles do not go. The subjects, quite in the manner of the reliefs, are limited to the representation of single human figures, priests, or monarchs, particularly with the fantastic adornment of a

double pair of wings (Fig. 52), although animals, especially lions, are also found. A setting of rosettes, disposed as a frieze, serves as frame for the picture. At Khorsabad, particularly in the apartments of the harem, and at Nimrud as well, traces of wall-paintings on plaster are preserved, the color scale of which, not being restricted by the processes of enameling, displayed a somewhat richer variety; but all this perished immediately on opening the mound, and it is from the painted enamel of the tiled surface alone that we form a judgment. In all this work, the drawing and the composition preserves the character of the reliefs, by the laws of which, internal as well as external, they are bound. An advance to the true spirit of painting seems forbidden to this art, and it offers only simple drawings in outline, colored, without any shading at all.

*B.—Persia and Media.**

The political destinies as well as the intellectual life, and consequently the art creations, of all the races of Central Asia, as we have before observed, constantly intermingle with each other. Thus in the Medes and Persians we become acquainted with the races who, first subjugated by the Assyrians, rose subsequently to be the inheritors of the power and mental tendencies of their former rulers. It was the Medes, settled in the mountain valleys and fruitful plains of the declivities south of the Caspian Sea, who broke the power of the Assyrians, until they were themselves subdued by the victorious Persians. Both races belonged to the Aryan stock, the so-called Zend people. Their religion, as we gather it from the doctrines of Zoroaster (Zarathushtra or Zardusht), was based upon a dualism of an essentially moral character. The kingdom of light or of Ormudz—that of goodness, purity, and holiness—is placed in opposition to the kingdom of Ahriman, that of darkness or of evil. The spirit of light is symbolically worshiped in the sacred fire; but he is actually glorified in the striving of man after the pure and the noble. These views, which are combined with a simple contemplation of nature, reveal to us the practical bent and morally enlightened character of the national mind. Here, as among the Assyrians and Babylonians, we find a clear system, in which the moral powers that rule our being are sharply and clearly defined, and man is placed with free consciousness between the conflicting powers of good and evil. Corresponding with this disposition of the mind, we find the fashion

* Coste and Flaudin, "Voyage en Perse"; Texier, "Description de l'Arménie, de la Perse," etc.; Brugsch, "Reise durch Persien"; Dieulafoy, M. A., "L'art antique de la Perse, Achéménides, Parthes, Sassanides."

of their artistic works. The inclination to energetic action leads here, also, to preponderating emphasis being given to worldly power and dominion, though certainly not without reference to the divine, both by symbol and inscription. Among the monuments exclusively dedicated to religious aims, the simple stone fire altars on the mountain summits seem most worthy of mention.

As regards time, the Medes take precedence; but as regards the number of existing monuments, the Persians have the superiority; and this all the more, since up to this time no remains of Median art have been discovered. We must endeavor to fill up the gap as far as we

Fig. 53. Tomb of Cyrus.

can by means of the records of the ancients. Thus we learn that the Median palace at Ecbatana rose terrace-like in seven stories, and that the surrounding walls were gorgeous with various colors, and even with gold and silver. Many representations on the reliefs of Nimrud and Khorsabad afford us an idea of this building; and the terrace-like arrangement of structure betrays striking affinity with that discovered in Babylon and Nineveh. The traces of this ancient Ecbatana, which must not be confounded with one of a later date, the present Hamadan, are considered to be proved to be Takt-i-Suleiman, westward from the southern shores of the Caspian Sea.

Under the great Cyrus (559-529 B.C.) the Persians obtained as-

cendency over the effeminate Medes, extended their dominion with wonderful rapidity, and, spreading their conquering hosts over the whole of Central and Western Asia, entered Egypt victoriously under Cambyses, and established one of the most powerful empires of the world—an empire destined, nevertheless, to be shattered by Alexander the Great (330 B.C.). The period of building activity of the Persians, important remains of which have come down to us, em-

Fig. 54. Relief Portrait of Cyrus.

braces about two centuries, and may be considered, both as regards time and character, as the last echo of Central Asiatic art in the lands of Mesopotamia.

The residences of the "great king," as the Greeks called the Persian rulers, were at Susa, the Shúsh of the present day, at the head of the Persian Gulf; where important heaps of ruins have been partly

explored at Ecbatana, among the mountains far north of Susa, whose site is disputed but is generally accepted as at Pasargada, and Persepolis in the heart of Iran, and far to the southeast of Susa, and at Babylon after it was incorporated with the empire. Polybius tells us of the palace at Ecbatana, that the columns and beams were made of cedar and cypress wood, and were covered, like the exterior of the roof, with gold and silver plates. In this we may perceive the distinctive features of all the architecture of Central Asia, such as might have been expected in the lands of the Euphrates. More important still are the monuments that have been preserved in various principal parts of the true Persian mother country, in the regions which lie between the great salt deserts of the interior, and the steep, inhospitable shore of the Persian Gulf, and in the rich sloping and

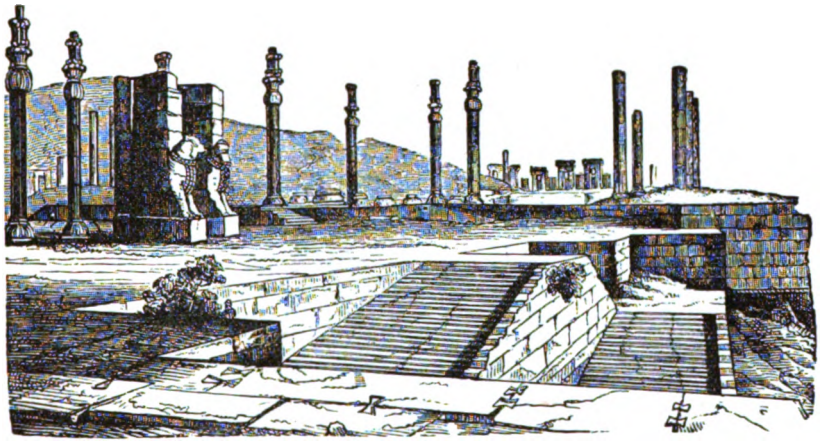


Fig. 55. Ruins of the Palace of Persepolis.

mountainous terrace land, with the fertile valleys of Shiras, Murghab, and Merdascht.

Among the oldest and the most important of the Persian monuments we may number the remains of the ancient royal residence at Pasargada, in the neighborhood of the present Murghab. Foremost of all, attention is drawn to the remarkable building which, according to the ancients, was known as the Tomb of Cyrus. Popular tradition calls it the grave of the mother of Solomon (Meschhed-i-Mader-i-Suleiman, Fig. 53). We have here an example of the way in which the Persians, when they suddenly passed from their simple patriarchal mountain life to the dominion of a great empire in a high state of civilization, endeavored to combine into a whole in their monumental creations the various forms elsewhere in use. The Tomb of Cyrus, built of blocks of sparking white and highly polished marble, rises

on seven terrace-like steps as a small gable-roofed house, the form of which, as well as the management of the material, might be traced to the already highly developed art of Greek Asia Minor. Even the form of the few details points to such an influence; especially that of the cornice round the roof, as well as of the pillars surrounding the building, and now, for the most part, destroyed. The pyramid in steps, on the other hand, is evidently a typical form familiar to Central Asia, and frequently noticed by us in the lands watered by the Euphrates. The whole structure, including the high bottom step is only thirty-five feet high. Its decoration and all marks of the burial of Cyrus have disappeared, but his portrait is pre-

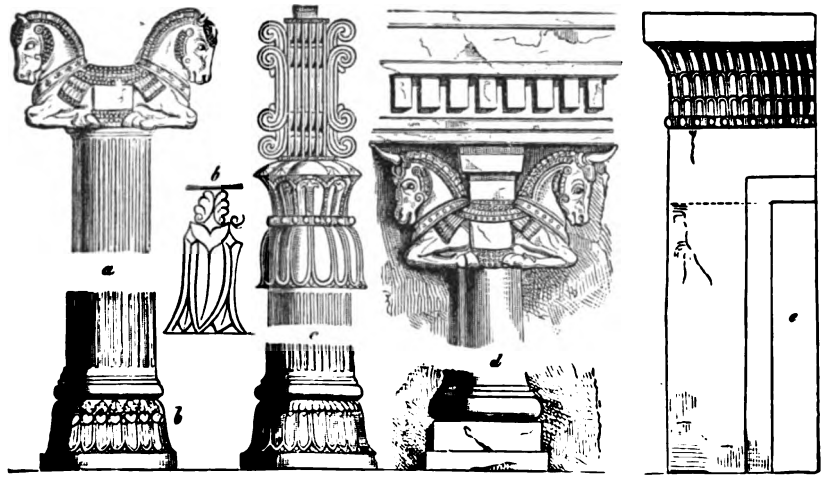


Fig. 56. Details of Persian Architecture.

served, singularly enough, upon one of the piers of the palace which lies in ruins near, and is thus designated by a contemporaneous cuneiform inscription, " I am Cyrus, the king, the Achæmenide." A figure in bas-relief, about sixteen feet high, wears a headdress of nearly the Egyptian fashion, and two mighty pairs of wings, which seem to be a characteristic symbol of the ruler (Fig. 54).

To the later period of the empire's prosperity, under Darius and Xerxes, until 467 B.C., we may assign the magnificent remains which mark the royal residence, called by the Greeks Persepolis (properly, Persopolis, city of the Persians) (Fig. 55), which lie somewhat southward toward Shiras, in the Plain of Merdascht. According to ancient records and the plan of the monuments, the old royal palace, into which Alexander with his own hand hurled the firebrand, seems

to have been the residence of the Persian sovereigns only at certain periods. The main building is called by the people Tchihilminar, i.e. the forty minars (minarets), in allusion to the slender upright shafts, or Takht-i-Djems-hid (the throne of Djems-hid). On the mountain ridge, which commands the vast plain, rises a magnificent structure of terraces, the plateau of which is gained by means of a double marble staircase of more than a hundred gently ascending steps. Splendid processions, which cover the sides of the steps in long series of reliefs, point to the former intention of the mighty structure. Arrived at the platform, which is also floored with slabs of marble, the ruins of a magnificent double portal are reached, with four stone piers, and as many slender marble columns, fifty feet in height, between them. On the front surface of the piers we again

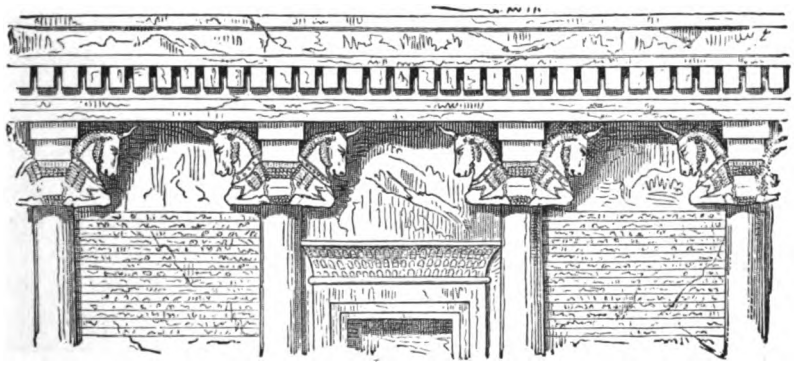


Fig. 57. Rock Façade of Royal Tombs in Persia.

find the colossal winged bulls of Assyrian art, though less impressive than those of Nineveh. A second double staircase leads to the upper terrace, which, almost square, and of great extent, is strewn over with ruined shafts of columns, shattered capitals, and a confused mass of rubbish. On the front part of the terrace, near the principal staircase, rise thirty-six broken marble columns, disposed in a square, surrounded on three sides with porticos of twelve columns in two rows. This whole vast structure seems to have served as a splendid porch to the principal palace. Behind it rise the remains of the former palace on higher terraces, with similar steps. Ruins of the vast apartments, with countless marble columns and noble entrances, and vestiges of a rich system of fountains, cover the entire height. The names of Darius and Xerxes, which are to be found in the numerous cuneiform inscriptions of the ruins, mark the epoch of their origin.

The style of these splendid buildings plainly shows a mixture of

many foreign elements into a new and peculiar whole. The terrace-like, pyramidal design is of Babylonic-Assyrian origin, transformed, however, here into a more cheerful effect, and aiming at breadth and freedom. The introduction of marble columns may be assigned to Greek influence. The form of the columns with their high bases (Fig. 56, *b* and *c*), the slender, elegantly formed shafts with their deep flutings, point to Ionic-Greek models. The capitals alone show, it seems, a design peculiar to Persia. They are either formed of two foreparts of bulls or unicorns (Fig. 56, *a* and *d*), or they consist of an upright and an inverted cup (Fig. 56, *c*), the former decorated with strings of beads, the latter with hanging petals, and the whole crowned with double volutes, placed perpendicularly instead of horizontally—an arrangement which shows a fantastic resemblance to Ionic forms, and thus early foreshadows the elements of a later decorative period. Other forms, again, pointing to Egyptian influences, are to be found in the crowning of the portals (Fig. 56, *e*), the principal of which exhibits the high Egyptian corona, with three rows of upright leaves covered with a heavy slab. No ruins are to be discovered of the walls themselves; this is taken as a proof that the material of which these were built, like that of the Assyrian buildings, consisted of unburnt bricks; but it is also highly probable that large parts of these pavilions remained unclosed except by curtains and low screens of wood. Equally few vestiges are to be found of the ceiling and upper stories. There is, therefore, no doubt that here, as in the palaces of Nineveh, wood was used for the ceilings, richly ornamented, probably, with shining metal. The marble-columned halls, moreover, can only have supported a wooden ceiling, as the columns, sixty feet in height, have a diameter of scarcely four feet, and an intervening space of thirty feet. Even the form of the capitals leads us to infer a slighter construction of the upper building.

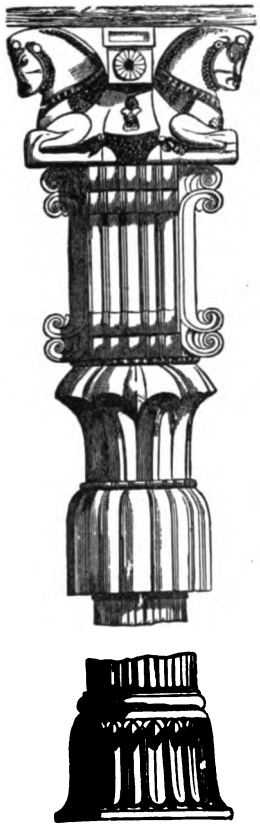


Fig. 58. Column from Susa.

We gain further information regarding Persian architecture from

the great façades of stone which also mark the ancient royal tombs in the neighborhood of Merdascht. While the funeral vaults lie inaccessible in the interior, the outer surface of the steep rock is decorated with façades covered with inscriptions in relief; and the center of these façades is a seeming door, with the characteristic high corona, while the half-pillars of their lower story exhibit capitals of unicorns, as at Tchilminar. Double beam-ends project between the animals, supporting an entablature, which, with its three members and its rows of strongly dentated ornament, recalls to mind the Ionic-Greek style (Fig. 57). Above this lower building is represented a fantastic, throne-like structure, on which stands the figure of the king in relief, sacrificing before a fire altar.

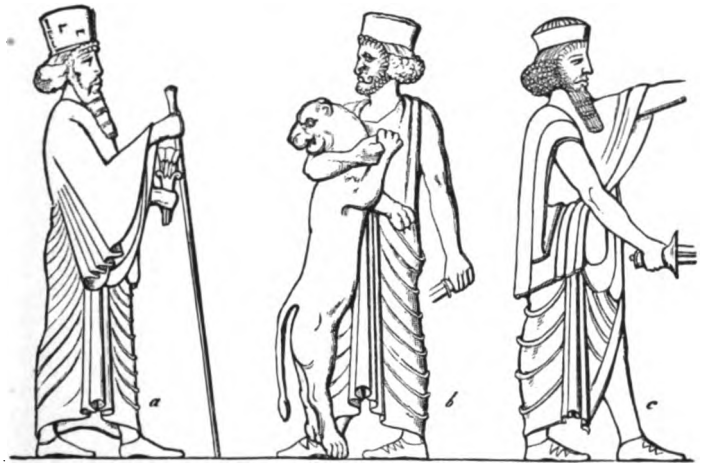


Fig. 59. Relief from Persepolis.

The English travelers Loftus and Williams have uncovered the remains of the great colonnade of a palace at Susa, the modern Shúsh, which is not unlike the one at Persepolis. The columns which they found there (Fig. 58) answer in their form to those of Persepolis, which show the richest, although at the same time the most *bæroque*, development of the Persian column; since above the calyx-shaped portion the double volutes are placed, and on these again rest the pairs of bulls which were intended to support the architrave.*

* William Kennett Loftus, while under the command of Sir William Fenwick Williams, made explorations in 1849-52, and afterwards at the head of a separate expedition. The results of both these explorations were published under the title "Travels and Researches in Chaldæa and Susiana, with an Account of Excavations at Wurka, the 'Erech' of Nimrod and Shúsh, 'Shushan the Palace' of Esther, in 1849-52." By William Kennett Loftus, F.G.S., London. James Nisbet and Co., 1857. Illustrations and Maps. The book is dedicated to Sir W. F. Williams; but he had no share in its authorship.

The Persian buildings, like those of Assyria, are rich in sculpture which, in its treatment, also reflects the style of Nineveh in its later, weaker manner; in this respect, therefore, marking the conclusion—the last vibration as it were—of the ancient art of Central Asia. On the other hand, the subject of the representations is new and truly Persian, and gives a good illustration of how the people, when they attempted to express their national ideas in sculpture, were obliged to make use of the forms of art already elsewhere developed. Although the numerous sculptures in relief which cover the sides of

Fig. 60. Struggle between the King and the Unicorn.

the steps of the palace of Persepolis (Fig. 59) also aim at the glorification of the kingly dignity, they do not, like the Assyrian, give a chronicle-like representation of definite historical events, but depict in a general manner the splendor of the royal household: the bands of armed bodyguards; the richly dressed retinue; the solemn trains of deputies from subject races, bringing the product of their land as tribute—bulls, rams, horses, and camels, as well as costly vessels and implements. On one gate pier the king is represented in a richly falling Median garment, with short, curled hair and long, flowing

beard, with the Median cap and long scepter; behind him advance servants with sunshades and fans of peacocks' feathers; and over him hovers the fantastic form of his guardian spirit, the Feroher. Another time we see the king in solemn repose, sitting on his throne with the scepter in his hand, and behind him one of his retinue (Fig. 61). The power of the king is also glorified in a significant and symbolic manner when, with true Oriental calmness, he seizes by the horn the fantastic, unicorn-like winged monster, which attacks him with rapid movement and furious gesture, and which he kills with a well-aimed thrust of his sword (Fig. 60); or when a mighty

Fig. 61. Relief from Persepolis.

lion—probably the symbol of kingly strength—furiously rends asunder the rearing unicorn. Besides the fabulous figure of the unicorn, which strangely forms the corner ornaments in the altar-like structures of the façades of the rock tombs, we also meet, as we have seen on the gate-piers, with gigantic winged bulls with human heads, such as the old palaces of Assyria exhibit. In all these instances we perceive the inclination to a preëminently ideal conception, which, while it substitutes a more calm, ceremonious, and solemn dignity in the place of the lively movement and energetic action shown by the Assyrian sculptures, nevertheless frequently exhibits within its limitations an attractive richness of ideas and a pleasing variety in the representation of the same fundamental form. This is effected also by a style

in many respects freer; though, on the other hand, it is materially inferior to the earlier Assyrian works in freshness of expression, in distinctness of character, and in the more meaning energy with which the forms are handled. The representations of animals alone, especially the battle scenes, unencumbered as they are with the solemn ceremonial of the court, breathe a life full of expression and action, and afford a remarkable contrast to the quiet bearing of the human figures. Only one instance of historical representation on a large scale is known in Persian sculpture; namely, the relief on a high, steep, rocky wall at Bisutun (Baghistan or Behistan of the present day), southwest of Hamadan, in which the victory of Darius over a number of rebels is represented in large reliefs. The colossal figure of the king, accompanied by two armed bodyguards, has his foot placed on an enemy writhing on the ground, and seems looking angrily at a troop of nine men marching forward in a line, who, wearing a different attire, and fastened together by a rope round their necks, with their hands bound behind them, are awaiting their sentence. Above, amid long cuneiform inscriptions, hovers the guardian divinity of the king.

Persian art, therefore, though not without elements peculiar to itself, combines the results of the art efforts of Central Asia into a splendid whole, and presents, more strikingly than any other within the circle of antique life, an early instance of deliberate eclecticism. Nevertheless, although here, as we have seen, a high point of civilization had been reached by these people, and the elements of an independent national life were not wanting, they had no longer that energy that was needed to blend vigorously and radically all that they had borrowed from others into a truly homogeneous whole.

Chapter IV.

THE ART OF WESTERN ASIA.

*A.—Phœnicians and Hebrews.**

THE narrow range of coast by which the Asiatic continent opens westward to the Mediterranean was inhabited as early as 2000 B.C. by the Phœnicians, a people of Semitic origin, who, in their early voyages along the shores of this inland sea, founded colonies and emporiums of trade in Greece and in the adjacent isles, in Sicily, and on the coast of Africa and Spain; and advanced, indeed, beyond the limits of this circle—limits too narrow for their spirit of enterprise—into the Atlantic Ocean as far as the shores of Britain. It was no yearning for conquest and political organization that urged these adventurous spirits to such bold voyages; it was only a desire for trade and gain. This made the Phœnicians the disseminators of the civilization of Western Asia. Their famous cities, Tyre and Sidon, situated midway between the East and the West, were the central points of the commerce of the world, the markets for the rich products of the civilization of the entire Asiatic continent.

Phœnician civilization was essentially mercantile and industrial. We find the men of Sidon early in possession of the secrets of purple dye and the manufacture of glass, and engaged in the casting of metals, as well as in the ingenious working of gold and silver. Many things, especially the arts of weaving and embroidery, they must have learned from the Babylonians; from whom they also borrowed their weights and measures, and communicated them to the nations of the West. All the artistic articles of luxury mentioned in Homer are ascribed, as a rule, to "the men of Sidon." On the other hand, higher artistic works, peculiar to themselves, seem to have been unknown to this truly commercial people. It is true they were famous for their skill in decorative architecture; and even the

* F. C. Movers, "Das Phönizische Alterthum." E. Gerhard, "Ueber die Kunst der Phönizier," in the Papers of the Academy of Science. E. Renan, "Mission en Phénicie"; text and illustrations. De Saulcy, "Voyage autour de la Mer Morte." I. Kenrick, "Phœnicia." Perrot and Chipiez, "Histoire de l'art dans l'Antiquité," vol. iii.

magnificent buildings of the neighboring Hebrews were thought to have been executed by Phœnician architects; still they seem to have had no highly developed style of their own whatever, since the wooden and brazen columns, ceilings paneled with cedar wood, and the covering of the walls with gold, of which we read, may be traced entirely to Babylonian influence, and imply no great system of intelligent construction. The few works which can with proof or with probability be assigned to Phœnician origin, consist, for the most part, of mighty embankments, or dikes, such as those on the Island of Arvad (Aradus),* opposite the Syrian coast, and on some parts of the African coast. It is altogether probable that most of their permanent buildings were rock cut, at least in part. Wherever temple remains are still standing—as in the Island of Malta, the so-called Giganteia, and in the neighboring Island of Gozo;† and, in Cyprus, the remains of the ancient temple to Venus—we find an inartistic primitive rudeness of design, which could be made to suit the Oriental taste only by the application of rich metal ornaments.

Somewhat fuller information on the subject of Phœnician antiquity has been obtained by the late researches of E. Renan; but when we compare the remains which he describes with those left us by the other peoples of antiquity, the impression of inefficient clumsiness which we receive from the examination of the Phœnician monuments cannot be got rid of. Nevertheless, what we find established by these researches—what, indeed, might have been predicted from the geographical position of the Phœnician country—that, alongside of the Mesopotamian influence, a strong Egyptian influence made itself felt—is of importance in the history of culture. The most important ruins in Phœnicia are those at Amrith, the old Marathus. Together with less important temple-cellas, several tombs are especially worthy of notice, in which are found the two forms common to the whole ancient world—the rock-hewn sepulcher and the tumulus—but which show in their construction a character peculiar to themselves. In several of these monuments the Egyptian influence is betrayed in the pyramid form, although, it must be confessed, in a manner more curious than structural. Thus, in one instance, a somewhat high cylinder is placed upon a cubical substructure which itself rests upon

* "The most extensive remains of the town walls are on the west side of the island, where they are still twenty-eight to thirty-eight feet in height, and constructed in a grand Cyclopean style."—Baedeker's "Palestine and Syria," p. 543.

† In Murray's "Handbook for Egypt," pp. xv.-xviii., the reader will find a good account of the ruins near Casal Crendi, in Malta. The ruins in the neighboring island of Gozzo (Gozo), called Torre dei Giganti (the Giant's Tower), are of similar construction to those at Casal Crendi, though on a grander scale. They consist of blocks of stone laid up without mortar. See also Bedford's "Malta," one of the monographs of the Portfolio Series.

a base; and upon this cylinder stands a five-sided pyramid, serving as a terminal. The whole structure may have measured something like thirty feet in height. Another of these monuments may be described as a cubical building placed upon a platform of two steps, and covered with a projecting slab with a hollow molding underneath. This slab serves as a base for another cubical block, which is topped by a rather steep, four-sided pyramid. In these tombs the grave proper is, as a rule, hewn out of the rock, under the surface

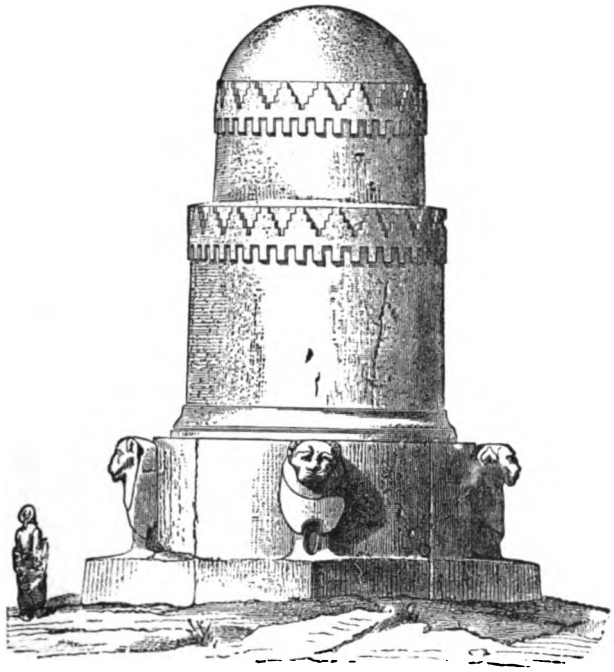


Fig. 62. Tomb at Amrith (restored). From Renan.

of the ground, and consists of a descending passage with large rooms, to which we are conducted by steps cut in the rock. The opening is closed with huge slabs of stone. The Egyptian influence in these works is unmistakable; and in the more important of them that character is betrayed which we recognize as peculiarly Phœnician, in the way of building with cylinders placed one above the other, and lessening as they ascend, and with a dome-shaped top (Fig. 62). The four rude half-figures of lions on the lower part of this building belong to a primitive period of art; while the dentated frieze, and the zigzag or step-formed battlement above it, are elements which meet us everywhere in the monuments of Middle and Western

Asia. In other examples the tombs present such a design as we find in façades cut on the rock of many a hillside tomb in Asia Minor. These rock-cut tombs resemble small chapel-like buildings, crowned with a gable which rests upon small columns and is ornamented with reliefs. Two examples of this sort are to be found at Maschnaka, where the columns have a primitive voluted capital. On a façade at Dschebeil (Jebeil), the old Byblos, on the contrary, the columns are wanting; but the gable, which is somewhat steeper than in the other examples, has for ornament a five-leaved rose.

There still remain to speak of certain temple-cellas at Amrith, which, however, are equally insignificant in their dimensions and in

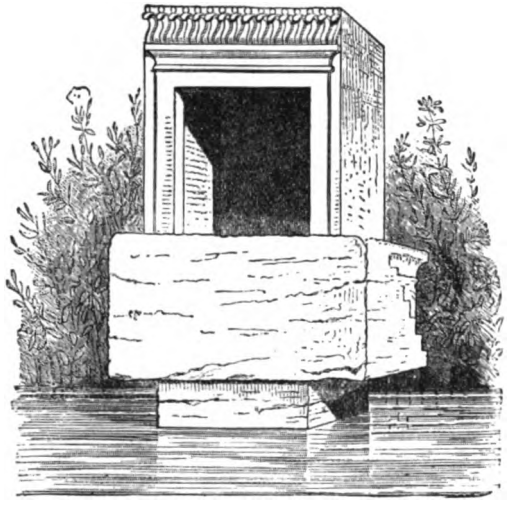


Fig. 63. Temple Cella at Amrith. From Renan.

artistic merit. Like the tombs, they consist of several large blocks, or are entirely cut out of a single stone. The example still known as El Maabed (the temple) consists of three large blocks, the whole resting upon a substructure about sixteen feet high. The building is surrounded by a court, formerly a pond, which also is excavated from the rock. The front of the cella is open; and it is probable that there were originally two bronze columns as supports to the projecting roof-slab. The Egyptian cornice crowns the top. Still more noticeable are the Egyptian details to be seen in two of these cellas standing opposite one another, both having the Egyptian cornice, above which again there is a frieze of asps (Fig. 63).

More rude, and indeed truly repulsive, are the few remains to be found of works of sculpture—idols and other images. The records

of the ancients respecting the image of the god Moloch, which had the form either of a bull or of a bull-headed man, prove that, in the personification of the ideas of Deity by means of the plastic arts, the Phœnicians held conceptions similar to those of the Egyptians and the races of Central Asia. The colossal sarcophagi also, now in Paris, at the Louvre, show that the Phœnicians were always dependent upon the art of the surrounding nations. The form of these objects is throughout Egyptian and mummy-like; and in the one—most probably the oldest—which belonged to King Esmunazar of Sidon, and which was found at Sidon, the features are thoroughly Egyptian in character, only barbarized, flattened, and unnaturally broad. The other remains discovered at Sidon, Byblos, and Tortosa retain the Egyptian form, but give a Greek stamp to the features. On a Phœnician monumental column in the same collection (Musée Napoléon III.) there is a sleeping sphinx with the pshent, the Egyptian royal crown; on another, two-winged lion-like animals with birds' heads are represented stretching out each a claw toward a vase placed between them—a motive which recalls to mind the monuments of Nineveh.

Still more important are the disclosures regarding Phœnician art furnished by explorations in Cyprus. That large island, deeply set in the angle between Syria and Asia Minor, was colonized at an early stage by the Phœnicians, especially on the south coast, and owing to its favorable situation and to its numerous harbors, it became an important center of commerce among the neighboring nations. In addition to this its wealth in copper was soon discovered and exploited by the Phœnicians. Nowhere is the crossing of Egyptian and Assyrian influences so noticeable as in the monuments of this country. We know that Thothmes III., king of Egypt, conquered Cyprus in the fifteenth century B.C.; and that later, in 707 B.C., under Sargon, the founder of Khorsabad, the island became tributary to Assyria. The cultural conditions of the country correspond to these changing political destinies. Later on the Greek element comes to the foreground in numerous colonies on the north and west shore of the island, and Greek art gradually displaced that of the Orient. It can be traced here from its earliest stage of development to the latest Græco-Roman epoch. Since 1866, when Gen. L. P. di Cesnola,* then American consul there, began his explorations, thousands of ancient tombs have been opened, of the earliest Phœnician epoch as well as of later ages; and several sanctuaries have been discovered.

A great number of statues of different sizes and of many styles

* Cyprus, "Its Ancient Cities, Tombs, and Temples," by General Louis Palma di Cesnola; London, 1877.

were brought to Europe and the United States; and the Metropolitan Museum of Art, New York, has the greatest number of these. Some are of Egyptian, some of Oriental type. They show the most diversified tendencies of style, and one can here see, though in coarse and inferior examples, how Greek art was developed from that of the Orient. Many of the statues have the restraint of attitude peculiar to Oriental art; they stand with tightly closed feet, the arms clinging firmly to the body, unless the right hand is holding an attribute, or,

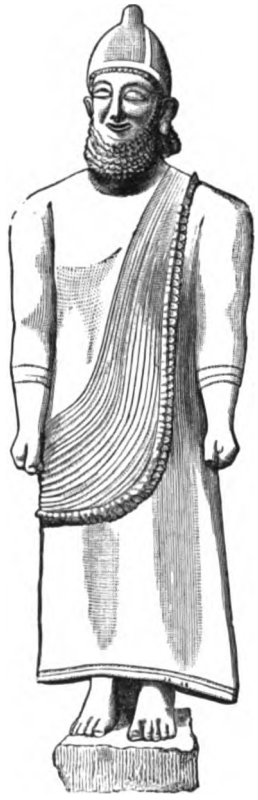


Fig. 64. Statue of the Assyrian Type.

Fig. 65. Cypriote Statue of Mixed Assyrian and Egyptian Type. From Golgoi.

wrapped in the cloak, is resting on the breast. The Assyrian type (Fig. 64) is revealed in the heavy Semitic cast of features, the full, daintily curled beard, the long, heavy garment, as unmistakably as is the Egyptian in the more delicate forms, and the usually beardless face and close-fitting dress, sometimes consisting only of an apron. Occasionally, both types appear mingled in the same figure, as in Fig. 65, where the drapery, the apron with the Uræus serpent, and the

rich neck-ornaments bespeak Egyptian custom, while the bearded face and the curving cap are Assyrian. The fashioning of these works is not elaborate; on the reverse it often appears to have been neglected, from which we may conclude that they were placed against a wall or pier. Numerous traces of color point to their having originally been painted. They do not convey to us the notion of a high artistic sense or taste in the builders. Among the most remarkable finds is to be counted a colossal bearded head, which seems to have belonged to a statue of about twenty-eight feet in height, also the heroic statue of a Heracles with a club, and of a priest, who holds in his hand a beaker, and a dove as the bird consecrated to Venus.*

Among the most important finds are the numerous painted clay

Fig. 66. Vases from Alambra. (Cesnola Collection.)

vases in a style of very high antiquity, coming from the ancient tombs of Dali, Alambra, and Larnaka. In these vessels, of which a number has been transferred to the Berlin Museum, we meet with that most ancient manner of decoration which grounds its purely linear motives principally upon models taken from the art of weaving, and secondarily upon those of metal-work, and which again affords the starting-point for the oldest vase-painting of the Greeks.

The most ancient vessels are those which, in utter disregard of the primitive round form, suggesting a similar treatment in the ornament, are entirely covered with straight-lined ornaments, such as zigzags, rhomboids, chessboard designs, like patterns on a carpet, a vertical arrangement of the lines being occasionally indulged in. For

* Copious publication of these sculptures by Joh. Doell, the Cesnola Collection, with seventeen lithographic plates, in the records of the Petersburg Academy, XIX. 4. St. Petersburg, 1873.

the most part, these vessels are of a pale-red clay painted with dark-brown designs, or of a black glaze with ornaments in lighter colors. There are other vases which show a better understanding of what the laws of the potter's art demand, such as those represented in Figs. 66 and 67, where spirals and concentric circles form the fundamental elements, although even here chessboard ornaments and zigzags are not wanting. Side by side with these purely linear ornaments there

Fig. 67. Vases from Dali. (Cesnola Collection.)

also occur plant forms, animal and human figures, but drawn so awkwardly that one can see how long the potters of Cyprus clung by preference to the simpler forms. The admission of lotus-flowers, rosettes, and of those peculiar architectural plant-like configurations which are found in Egyptian and Assyrian art (Fig. 68), proves again that Phœnician art lay under the intermingled influences of two civilizations. No less curious are numerous vessels whose apertures are characterized by a human head, or which are molded entirely in the shape of an animal, either bird, fish, or quadruped, betraying

more advanced phase in the development of the sense of form. To these numerous and valuable antiquities must be added a relatively considerable harvest in products of the metal-worker's art. Not only implements and weapons of copper and bronze, but particularly a great quantity of personal ornaments and vessels of gold and silver have been found in Cyprus; and although many of them are certainly of foreign origin, others seem to have the marks of a Cypriote style.

In such a consideration of style some larger dishes and bowls are of high significance, since in their delineation that Egyptian-Assyrian intermixture of style which characterizes Phœnician workmanship stands out most prominently. There is, for instance, a silver-gilt bowl in the Metropolitan Museum of Art, and stated to have been found at Curium, which represents upon its center the combat of a four-winged man with a lion. This figure, with the tutelary deity hovering above it, reminds one of something Assyrian as well as of the sculptures of Persepolis, notably the relief-sculpture of Cyrus (Fig. 54). The scenes in relief, surrounding the central representation in a smaller and a larger circle, show definite traces of Egyptian and Assyrian variations of style, ornaments, and costumes freely adapted and intermingled. Not less interesting is the fragment of a silver patera from Amathus, showing winged sphinxes, scarabs, and those human figures with wings upon their arms peculiar to Egyptian art. In the outer circle scenes of peace and war are represented, especially the siege and storming of a fortress, in which not only Egyptian and Assyrian, but unmistakably also ancient Greek, costumes are intermingled. Another silver bowl is daintily ornamented all around with conventionalized lotus-blossoms. Below are seen four representations of a bark with different scenes, between them all sorts of animal forms—horses, cattle, and water-fowls, some flying, some swimming; finally, in the center, human beings, fishes, horses, and cattle are swimming on a surface decorated with water-lilies. Varied as are these artistic objects, they nevertheless confirm in their essential features our conception of the lack of independence in the culture of this nation of traders, who did not get beyond an eclectic

Fig. 68. Vase from Larnaka.

employment and blending of art forms of the neighboring nations, first of the Egyptians and Assyrians, then of the Greeks.

Still less independent life is to be found in the art of the Hebrews. Entirely dependent on the Phœnicians, as we have seen, in architecture, they were ready to send to Tyre and Sidon when they needed artists and skilled builders. We know that the gold plates which covered the interior of Solomon's Temple were richly adorned with representations of flowers and palm-trees, and also with those of cherubim. Moreover, two cherubim of pure gold were placed upon the Ark of the Lord in which the Tables of the Law were preserved; and two, much larger, covered with gold, spread out their wings across the whole width of the inner sanctuary of the Temple. Even in the forms of these cherubs, which are represented in the Holy Scriptures as human but with wings, we perceive undoubtedly Persian ideas, and are involuntarily reminded of the relief of Cyrus (Fig. 54).

Fig. 69. Coin with Representation of the Temple of Venus (Astarte) at Paphos.

The internal arrangement of the Temple of Jerusalem, which has given occasion to much learned dispute, may be left to archæological discussion. As regards its artistic form, we cannot presume to have arrived at distinct ideas respecting its construction, or the impression it produced. The division into forecourts, the Holy Place, and the Holy of Holies, awakens, indeed, a general reminiscence of Egyptian temples; but neither their extent, nor the multiplicity of their rooms, nor the repeated use of the colonnade is to be traced in the description of the Temple of Solomon. The two famous brazen pillars of Jachin and Boaz, with which the skilled worker, Hiram of Tyre, adorned the porch, might furnish points by which to judge of the style, if their description in the books of the Old Testament were not wrapped in such obscurity that it is hopeless to attempt to compare it with any known pillar form of Oriental antiquity. They possess the greatest affinity, perhaps, with the pillars of Persepolis; while the proportions of shaft and capital accord more with those of Egyptian architecture. That the placing of such pillars at the temple-porch was usual among the Phœnicians is proved by some Cyprian coins (Fig. 69) representing the famous Temple of Venus (Astarte) at Paphos. We there see on each side of the porch an isolated pillar, suggesting a resemblance to the pillars at the Temple of Jerusalem. It is thought that the building was, in its general plan, slight and low; rather rich than massive. No other building of

the ancient Hebrews is known at all, and it is to be observed that all the buildings of Jerusalem and its neighborhood, even the tombs in the valleys, are of the time of the successors of Alexander the Great, that is, of the fourth century B.C., or of the Roman ascendency; with no traces of an independent local style.

*B.—The Races of Asia Minor.**

Jutting out toward the West from the mighty continent of Asia is a peninsula-like territory, which, inclosed by the Black, the Ægean, and the Mediterranean Sea, stretches out with its richly indented coast toward European Greece. This favorable coast, with its many harbors, and bordered by numerous fruitful islands, is as much

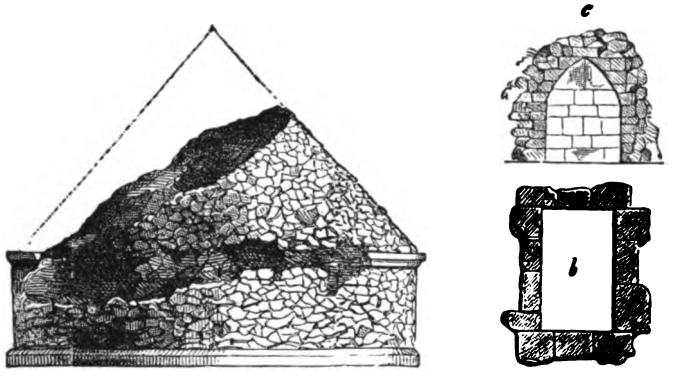


Fig. 70. Tomb of Tantalus in Lydia.
b, Plan of Interior Cell; *c*, Section of Cell, Showing Manner of Roofing.

in harmony with the West as the inland, divided by intersecting mountain chains; and, with its luxuriant lowlands and many smaller valleys, is in contrast to the cultivated territories of the East, with their larger and more compact masses. The interior alone is a high, unfruitful mountain plateau, from which the coast-lands descend in wooded slopes and meadow-land. The delightful climate softened by the sea and the mountains, the hospitable coast with its many inlets, early held forth strong allurements to colonization; so that, far back in time, Semitic, Aryan, Thracian, and Greek tribes had settled along the coast and on the islands, and had early reached a certain stage of civilization. The diversified topography of the

* Texier, "Description de l'Asie Mineure." Ramsay, W. M., in "Journal of Hellenic Studies," vol. iii. Perrot and Chipiez, "Histoire de l'Art dans l'Antiquité," vols. iv. and v.

interior was favorable to the growth of a large number of small tribes, which, although allied in origin, habits, language, and religion, yet developed in different ways. Thus we find even in Homer an indefinite number of races crowded together on a territory in no wise extensive: we find the Alizonians with their wealth of silver, the Chalybians skilled in the preparation of ores, the combat-loving Mysians, the Dardanians and Trojans, the horse-breaking Maonians, the Lycians, Phrygians, and others.

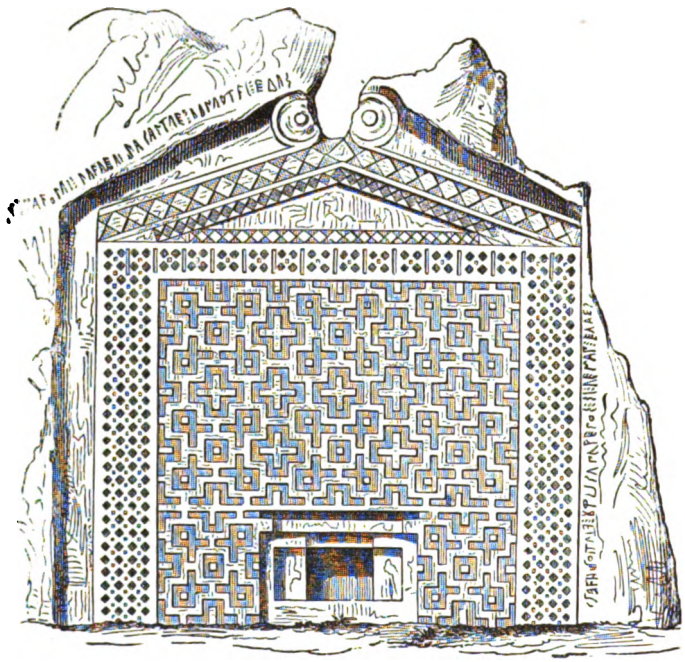


Fig. 71. Tomb of Midas.

Among these numerous races, a few chief tribes soon became prominent, and led the van in the development of civilization. We must for a time leave unnoticed the colonies of Greeks settled on the western coasts, in order that we may consider them later with their European brethren. Of the indigenous races of Asia Minor, we must especially notice the Phrygians, Lydians, and Lycians. The Phrygians inhabited the central woody highlands of the country, bounded on the west by the Lydians, who were settled in the territory watered by the winding Meander; the Lycians had established themselves on the southern coast. Among these races the Lydians had risen to increasing power and to more signal importance since the reign of

their king, Gyges (about 700 B.C.), who carried on victorious contests with the neighboring States. Through his successors, Ardys, Sadyattes, and Alyattes, they gained dominion over the whole of Asia Minor; and under Crœsus they even brought the Greek colonies under subjection. About 550, however, the Lydian power came to an end, when Cyrus, advancing in his victorious march, took the splendid capital Sardis, and incorporated the country with the great Persian empire.

The monuments which belong to the early ages of Asia Minor consist chiefly of tombs, which are to be found in considerable number and varied structure, from the simple form of the tumulus to the more complicated and individual building. The earliest and most primitive of these works are to be met with in Lydia, for the most part in the form of tomb-mounds, consisting of a cone, often of considerable dimensions, placed upon a circular substructure. In the center of the building a quadrangular vault is hewn out of the solid rock; and the roof is formed by gradually projecting the stones of the opposite sides until they meet over the middle. On the north coast of the Gulf of Smyrna a great number of such tumuli are preserved; the largest among them is the so-called Tomb of Tantalus, the lower diameter of which is about two hundred feet (Fig. 70). Similar tomb-mounds, some of them also of great extent, are to be found in the neighborhood of ancient Sardis, among them three of prominent importance, which are supposed to be the tombs of the kings Alyattes, Gyges, and Ardys.

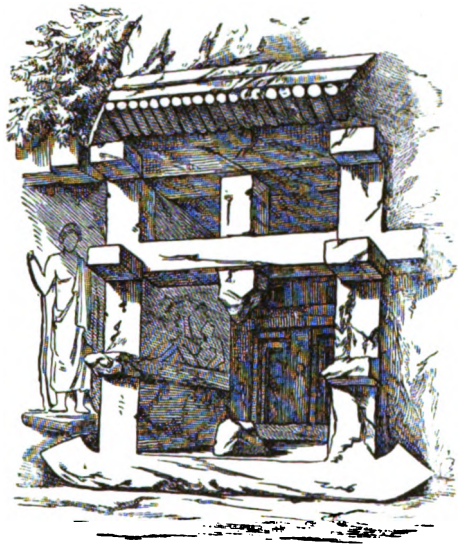


Fig. 72. Rock Tomb at Myra.

In contrast to these large, primitive, isolated buildings, the monuments of Phrygia are found to be essentially different. They consist of rock-cut sepulchers with artistically sculptured façades. If, in the plan of these structures, we find an analogy with the rock-fronted sepulchers of the Persians, this analogy by no means extends to the artistic execution; on the contrary, the Phrygian monuments

exhibit in every respect a mode of treatment peculiar to themselves, and cannot be brought into comparison with other works. The façades, which are of considerable size, have the general form, sometimes of a square front topped with a cornice, sometimes of a gabled front. These latter consist of a quadrangular panel, the top of which rises in a low pediment. But there is no suggestion in any part of this design of a definite architectural form or arrangement.

Fig. 73. Rock-Cut Lycian Tomb.

These remarkable façades might be compared to great tapestries stretched in a vast frame. The frames are decorated with rhomboidal ornaments, while a species of meander pattern covers the whole surface of the interior. The gable, also, is usually bordered with a rhomboidal pattern. No part in the whole façade stands out with strong effect of shadow; no powerful profile asserts the rights of masonry. Tapestries and textile fabrics with light wooden framework are evidently the models on which they were constructed. Below, in the center, is an opening by which the sepulcher is entered. The only characteristic architectural feature is the volute, with a pair of which ornaments the point of the gable is crowned. This form, which we also meet with in Persepolis and Nimrud, we may therefore reasonably regard as peculiarly belonging to Western Asia. Conspicuous among these monuments, both for size and age, is the so-called Tomb of Midas at Dogan-lu, about thirty-six feet broad by forty feet high, with ancient Phrygian inscriptions (Fig. 71).

Besides these peculiar monuments, others also occur, which show an advance toward plastic decoration, and in a striking degree call to mind the lion gate at Mycenæ. The façades are finished off with a gable, whose cornices are denticulated and rest upon columns,

crowned occasionally with a reed-like capital. Above the entrance there is a discharging arch, occupied by two lions in high relief, usually of colossal size. There is here unmistakably an inner relationship to that very ancient Greek monument.

At Arslan, a pediment is filled with two lions facing a central pillar, but these are not rearing up nor fighting. The rear wall of

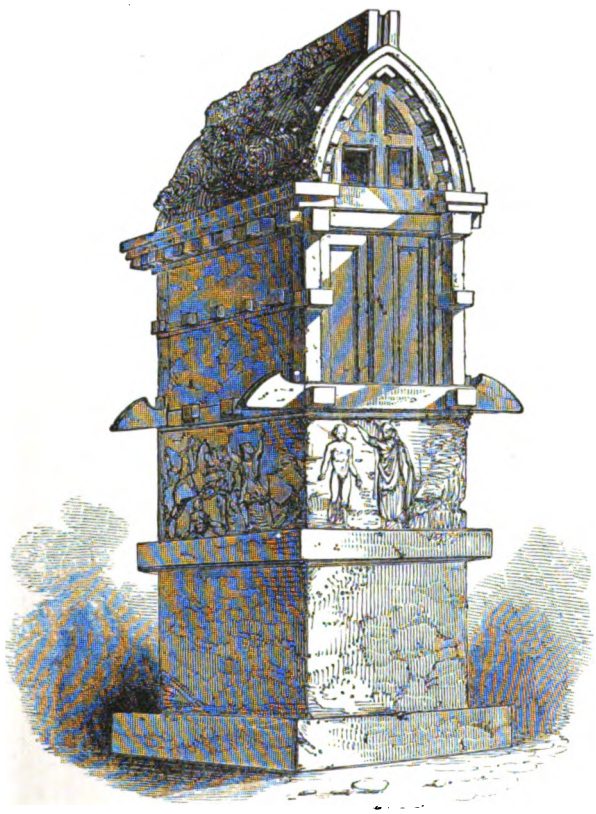


Fig. 74. Lycian Tomb (British Museum).

the interior is filled by a nude human figure, and two lions on their hind legs, near each side. A tomb discovered by Mr. Ramsay had a very large bas-relief showing a kind of trophy of arms, on either side of which is a warrior with spear balanced and leveled as if about to be thrown.

Another form, again, and a new stage of development, is exhibited in the monuments of Lycia. Here, too, the rock-cut form is used by preference, though in a very different manner. Either the tomb

is chiseled out of the mass as an independent monolith—the native rock being cut away around it (Fig. 74)—and, in the form of a sar-

Fig. 75. Rock-Cut Tombs at Myra.

cophagus represents a wooden construction with all the marks of intentional imitation; or the sepulcher—as is frequently the case—is hollowed in the rock, upon the exterior of which a façade is chiseled,

exhibiting still more decidedly the appearance of a wooden building (Fig. 73). A complete representation of sills curved upward, of posts, studs, and beams, shows a close and careful imitation of timber construction; so that one might imagine this a log-house turned to stone (Fig. 72). The upper part is formed either horizontally, or, as in the Phrygian tombs, with a gently rising gabled roof: yet not, as is the case with these, in expressionless, unbroken flatness, but with a strongly projecting cornice, characteristically decorated with an imi-

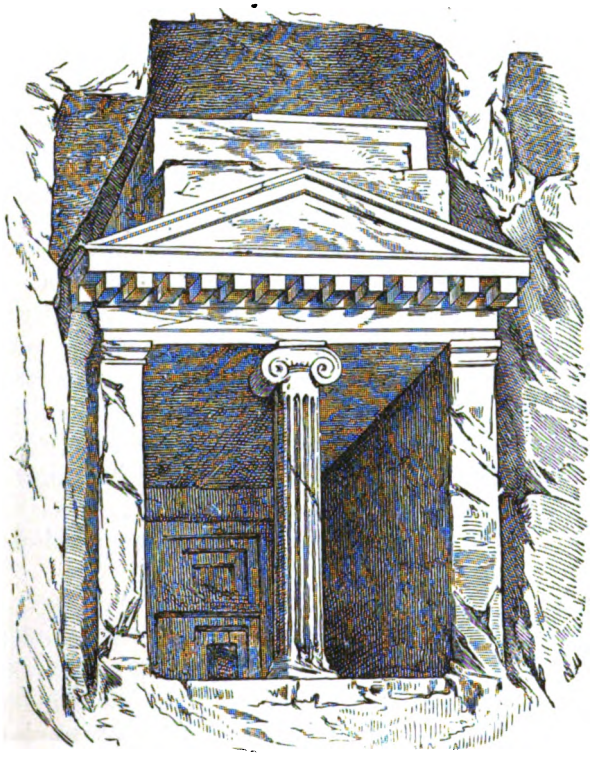


Fig. 76. Tomb at Kyaneä-Jaghu.

tated row of cross-pieces of timber. The principal places in which such monuments are discovered are Phellus, Antiphellus, Xanthus, Telmissus, Myra, and others. Sometimes the whole face of the mountain is covered with these remarkable constructions; so that, in such a necropolis, tomb follows tomb, one rising above another, all crowded together in the closest neighborhood (Fig. 75).

Besides these tombs, there are many others in Lycia in which, while the rock façade is the fundamental architectural motive of the

monument, it is treated in a manner essentially different, and evidently influenced by Greek models. Here the Græco-Ionic column is used, and a distinctly Greek form is given to the upper parts, the entablature, and the gable roof. This is done in two ways: either the façade is chiseled on the rock in strong relief, after the usual manner; or a portico-like entrance is formed with detached columns. As a rule, there are two columns—though occasionally only one—placed between two strong angle-piers. The forms are decidedly Hellenic-Ionic: the capital with the volutes; the base with the circular projecting and receding moldings; the tapering column, chiefly without fluting; the entablature in two parts, crowned with a dentated cornice; and the gable, finished at the point and ends with a rude, simple acroterium. Monuments such as these are to be found at Telmissus, Antiphellus, Myra, Kyaneä-Jaghu, and other places (Fig. 76). Besides these decided Hellenic forms, there are reminiscences of Persian architecture to be found in various works, such as on a façade at Limyra: the strongly effective crowning of the door by a fluting decorated with leaves. Lastly, in a monument at Xanthus, now in the British Museum in London, there is a completely finished detached building. It consists of a temple-cella in the Ionic style, resting on a square basement. At first it was supposed to be the Tomb of Harpagus; it has now from its sculptured ornaments received the name of the Nereïd Monument. Its origin may be dated about 370 B.C. The wonderful inclosing wall of the Temenos at Gjolbashi had a continuous frieze of elaborate sculpture, now in Vienna. These works are, however, wholly Greek in inspiration.

As regards the date of the monuments of Asia Minor, we may expect further information from the decipherment of the inscriptions: in the mean while, the character of the reliefs sculptured on them must be the standard by which to determine their age. The earliest works are undoubtedly those primitive tomb-mounds of Lydia, which may reach as far back as the period of Gyges and Alyattes (seventh century B.C.). After them, as belonging to the sixth century, follow the Phrygian monuments with their naïve and playful style; while the Lycian tombs, with their imitation of a wooden structure, or of decidedly Hellenic forms, belong to the fifth, and even to the third century.

On the other hand, the rock-cut tombs of Paphlagonia,* but recently discovered, belong without doubt among the most ancient monuments. They are distinguished by being provided with open

* Cf. G. Hirschfeld in the *Proceedings* of the Academy of Science, Berlin, 1885. Also Perrot and Chipiez, "Histoire de l'Art," v., p. 196.

porticos resting on columns, either one, two, or three in number, which taper considerably, are of massive proportions, and have primitive volute-capitals which might be looked upon as prototypes of the Ionic order. In one case at Iskelib, where four tombs have been preserved, clumsy reclining lions form the capital. The cushion-shaped bases are equally bulky and ponderous. The façades are generally set in a profiled frame, above which rises a flat gable. These are, perhaps, the earliest examples of this form, which is evidently fashioned after the timber-architecture of the mountain regions. It seems still more peculiar that in several instances, as in Hambarkaya, two lions are represented in the pediment embracing symmetrically a stele-shaped object, occupying the center. A magnificent effect is produced by three lions reclining in front of the columns; they are carved from the rock, and call to mind Assyrian models. Occasionally the place of the columns is taken by a pillar of equally rough workmanship, as on a tomb at Kastamuni, where two pillars form the porch, while the pediment is occupied by two winged quadrupeds surrounding what, to all appearances, is a female figure in the center. Somewhat farther south, near Aladja, there is still another very impressive monument, from which, however, the gable is missing. It is conspicuous for its portico resting upon three clumsy columns. The vestibules and the tomb-chambers are exceedingly roomy; the ceilings of the latter are mainly formed by flattened arches or gable roofs. In the center of the gables there is a short prop, which again is derived from the timber construction. Thus, these structures, considerably antedating all Mesopotamian influences, are among the earliest examples of an imitation in masonry of wooden houses.

The independent sculpture of Asia Minor, when not bearing traces of Hellenic inspiration, has hitherto come to our knowledge only in scanty, isolated remains, and although much light has been thrown on it recently by the investigations of modern scholars, the deficiencies in the knowledge of the country are still so great that a connected description is not to be thought of. But this much seems established, that in the most widely separated portions of that region many monuments have survived bearing the stamp of a very high antiquity. They are, for the most part, rock-carved reliefs, rough and plain, indeed, often crude, in treatment, and bear witness to the presence of an independent, though not highly developed sense of form. In the course of time this is blended with influences of Mesopotamian, sometimes also of Egyptian, art without entirely obliterating its original character. These works of art, taken together with certain sculptural objects in North-

ern Syria, have been designated as the works of the Hittites, whom we meet in the Old Testament as the descendants of Heth, a son of Canaan, and upon Egyptian and Assyrian monuments as the people of Cheta and Chatti, respectively. There is positive proof that they were bound to pay tribute to Thothmes III., in the fifteenth century. But under the nineteenth dynasty they rose to the permanent rule of Syria, and their king assumed the title of "Great Prince of the Cheta." During the reign of Ramses II. they became involved in protracted wars with the Egyptians, and they are described to us in the famous epic of the Pentaur, the oldest epic in the world. It is possible that at that time their power extended as far as Asia Minor. Upon the conclusion of peace, Ramses married the daughter of the Cheta prince, and both nations remained peaceful allies for many years. Under Ramses III., however, the Cheta, with other Asiatic tribes, invaded Egypt, but were repulsed, pursued across the borders into their own territory, and "their miserable king was captured alive." Megiddo, Kadesh on the Orontes, and Karchemish on the Euphrates are named as their principal cities. In spite of this overwhelming defeat, they continued to figure upon Assyrian monuments for a considerable period after, and only about the end of the eighth century they were so completely overthrown by Sargon that henceforth their name does not appear in history.*

In the period of their national power, closely approximating one thousand years, they found sufficient inducement for the creation of monuments, and left behind a number of works which in part are to be found in Northern Syria, but also repeatedly in Eastern and Central Asia Minor.† They followed the example of the people of Mesopotamia in covering their palaces with stone slabs adorned with reliefs. The distinguishing features of these sculptures are to be found chiefly in the national dress, consisting in the case of warriors of a short tunic and a high, cone-shaped helmet, the most conspicuous part, however, being the pointed shoes. Even if one were to ascribe to the Hittites all the monuments, here taken into account, they would after all prove to be a race possessing but moderate artistic aptitude, which in the long run could not escape the mighty influences of the prodigious art of the Assyrians, and which, through this influence, fell to the level of a motley variety of styles instead of rising to a consistent course of development.

Among the most important monuments in Asia Minor must

* W. Wright, "The Empire of the Hittites, with Decipherment of Hittite inscriptions," by A. H. Sayce; London, 1886.

† For a complete survey, see Perrot, "Histoire de l'Art," iv., pp. 483-812. Cf. Hirschfeld, in *Proceedings of the Academy of Sciences;* Berlin, 1886. Also K. Humann and O. Puchstein, "Reisen in Klein Asien und Nord Syrien"; Berlin, 1890.

be reckoned the palace ruins of Uejük in Cappadocia, which unquestionably also rank with the oldest.* There we behold a portal with gigantic figures of sphinxes; friezes with a procession of priests, one of whom is leading several victims; again, some musicians, a sacred rite, various figures of animals, among them a lion seizing a ram; finally, the curious symbol of the double eagle. Far more important, more extensive, and withal more perfect, are the monuments of the neighboring Boghaz-Köi, where the foundation-walls of a palace and of extended fortifications still exist, surmised to be the remains of Pteria. There a throne is to be seen with huge and very solid lion forms, and a main gate adorned with lion heads. The ground-plan of the palace again recalls Assyrian models. Most noteworthy, however, are the large reliefs on a rock-hewn sanctuary in the neighborhood of Yasili-Kaya, showing the meeting of two processions of male and female figures, probably representing a wedding celebration. The women wear long garments and headgears resembling mural crowns, the men short tunics and high, conical helmets, and all wear pointed shoes. The principal figures in front stand either on leopards (as in some Mesopotamian monuments) or on a double eagle (as at Uejük); the male leader stands on the bent necks of two human figures. The winged disk of the sun also appears, with which Assyrian art has made us familiar, while two goblin-like beings are holding aloft a large crescent. Altogether fantastic is a colossal figure whose shoulders are formed by two lions' heads, while two lions turned downward embrace the rest of the body. These fantastic elements are blended, in the arrangement and treatment of the whole, with certain ceremonious conceptions in a truly Oriental manner. Casts of these curious works are to be seen in the Berlin Museum. Kindred works, for the most part rock-carved reliefs, are found in Phrygia at Giaur-Kalesi, where the remains of old fortifications may be seen, with two large figures of warriors wearing the high conical helmet, short tunic, and pointed shoes. Of a similar nature is the rock-relief of Karabeli, near the village of Nymphi, which likewise represents a striding warrior, a bow in one hand, a spear in the other. On a wall at Kalaba we may see a striding lion in Assyrian style, and at Eflatum in Lycaonia an odd-looking group of twelve figures with arms raised on high, such as may be seen also on Assyrian chairs. Here again winged sun-disks remind one of Mesopotamia. Of a widely different kind is a rock-relief at Ibris, showing a colossal figure more than twenty feet high, with bearded face of wholly Semitic cast, holding ears of corn and grapes, clothed with a short tunic and pointed shoes, and, beside

* Cf. Texier, Perrot, Hirschfeld, Humann-Puchstein.

it, a figure half as large, with the same Semitic type of the bearded head, wearing a diadem and a long Assyrian garment.

Passing to the monuments of North Syria, Marash is the first to be considered. On a relief of primitive crudeness two women are seen partaking of a meal; on another we witness a religious act; while a basalt-stele of primitive ungainliness shows a woman seated with a child on her lap. On the city wall the relief of a lion in a more advanced style indicates Assyrian influence, as does also the head in relief of a flute-player, now in the Berlin Museum. Mesopotamian art is also suggested by the winged lion rampant at Sindjirli, and the hunting scene, covering a considerable series of relief-slabs, likewise in Berlin. The transition from rock-sculpture to slab-reliefs once more signalizes Mesopotamian influences. Also on the relief at Karchemish, representing a reclining lion bearing two men, Assyrian workmanship is called to mind by the wings on one of them and the long, fringed coat. In all these instances we come across the pointed shoes; they are, however, lacking in the relief of a lion-hunt from Saktshe-Gösü, now in the Berlin Museum, which so completely resembles Assyrian work, translated into a provincial mode of expression, that it must be assigned to the closing epoch of that art (about 700 B.C.). Of the peculiar hieroglyphics of this people, the most conspicuous monument is to be seen at Djerablus. In that work the Hittites remain true to their national style, and in face of the Assyrian cuneiform characters and the hieroglyphics of Egypt, adhere to their own system.

Thus the ancient art of each different race which possessed Asia Minor shows the influence of the same causes, the effects of which have exercised a deciding influence upon the political destiny of the country. Lacking a fixed centralizing power, the various elements have been scattered; and the less an energetic predisposition to the higher development of art was innate in the different races, the more easily must these races have yielded to the influence of the powerful neighboring nations, which had such a decided effect also upon their political condition.

A few later monuments may be referred to here which belong to the last century before the Christian era and owe their origin to the dynasty of Kommagene.* They are tombs in which the ancient Oriental form of the tumulus of Asia Minor is most curiously blended with the forms of Greek art and the religious conceptions of the Persians. Their importance is enhanced by the fact that the date of

* Cf. Humann and Puchstein. Sir Charles Fellows, "Journal of an Excursion into Asia Minor," 1839; "Xanthian Marbles," 1843; "Account of an Ionic Trophy Monument," 1848.

several of them is fixed by comprehensive votive inscriptions in Greek. One of the smaller and earlier is the tomb of Kara-Kush, a tumulus flanked by pillars standing in pairs and bearing figures of eagles and bulls, while on a relief close by a man and a woman are seen shaking hands. The inscription designates it as the tomb of Isias, mother of King Mithridates, and of his sister and her little daughter. The second tomb, at Sesonk, also consists of a tumulus, surrounded on three sides by a similar arrangement of columns in pairs. Here, as at Kara-Kush, the style of the columns is crudely Doric. This construction is displayed on the grandest scale in the imposing monument which was erected upon the summit of Nemrud Dagh, about 7000 feet high, by Antiochus I. of Kommagene, as is attested by detailed inscriptions. This is a mighty tumulus about 160 feet in height and about 525 feet in diameter, encompassed on three sides, east, west, and north, by the most imposing and extensive terraces. Of these the first two are adorned with colossal statues of Antiochus and of the gods he worshiped, who sit enthroned in solemn state and attained a height of twenty-six feet. The forms of lions and eagles appear on either side of them; especially conspicuous is the huge lion bearing the horoscope of Antiochus, the stars being chiseled on his figure. The statues are raised of ponderous stones and then treated in a style betraying the influence of the later Hellenic art in its provincial adaptation. In addition to these colossal creations we meet with a number of large reliefs, representing ancestors of the reigning house, and of Antiochus as he is greeted by Zeus, Heracles, and Kommagene. A similar relief, showing Antiochus greeted by Heracles, may be seen at Selik near Samosata. Finally, notice must be taken of the rock-carved relief at Gerger, the ancient Arsameia, representing a striding warrior's figure, about thirteen feet high, with a scepter or lance and the sacrificial knife, and on his head a high, conical tiara. A Greek inscription designates this work as a foundation of Antiochus, who, it seems, erected a monument here to the memory of his grandfather. All these creations bear witness that art in those regions remained imbued to the end with the character of an eclecticism, resulting from an intermingling of various styles.

Chapter V.

THE ART OF EASTERN ASIA.

*A.—India.**

I. LAND AND PEOPLE.

FROM the Himalaya, the highest mountain range in the world, covering with its vast glaciers an extent of country equal to the length of Scandinavia, there slopes down in grand terraces a land which, projecting southward in a compact mass, stretches its tapering point far into the Indian Ocean. This great peninsula—which, from its northern boundary to its most southern headland, Cape Comorin, occupies an extent as great as that from the shores of the Baltic to the most southern cape of Greece—is predestined by its natural position for an exclusive civilization. Separated from the northern countries by the rocky walls of the Himalaya, and inclosed toward west and east by the mighty streams of the Indus and Brahmaputra, the immense territory of Hither India is compressed into a continental mass, only divided by a rich network of rivers. Among these, the most important is the sacred stream of the Ganges, which, with its tributary the Jumna, rushes down from the ice-fields of the Himalaya, and, flowing in one united stream from Allahabad, empties its waters by a hundred mouths into the Bay of Bengal.

As everywhere in the earliest history of mankind a higher development of civilization has followed the course of mighty streams, so is it also here. The ancient glory of the Hindoo empire first flourished in the land inclosed by the two sacred rivers, Ganges and Jumna: here, even in the twelfth century B.C., stood the magnificent capitals of the Brahminical rulers, Hastinapur, Indraprastha, and Madura,

* Langlès, "Monuments anciens et modernes de l'Hindoustan." Cunningham, A., "The Bhilsa Topes," Daniell, "Excavations of Ellora." Fergusson, James, "History of Indian and Eastern Architecture." Griffin, Sir Lepel, "Famous Monuments of Central India." Bon, G. le, "Les Monuments de l'Inde."

and, farther down the Ganges, Palibothra—great cities, whose size, wealth, and magnificence were extolled in the old Indian epics. Nor ought this to excite our wonder, since in the earliest ages the nature of the land produced a civilization of rare abundance and splendor. No country in the world displays such luxuriant productiveness, combining in the north, in Hindostan Proper, the phenomena of all the zones, from the eternal ice and scanty vegetation of the glacier-world to the exuberant undergrowth and majestic palms of the tropics. Under the glowing tropical sun the moist soil becomes fertile beyond imagination, producing for man, in lavish abundance, all that he needs for life, but also subduing the mind with the overwhelming force of its fecundity.

It could not be otherwise than that the exuberancy of Eastern nature should have captivated the mind of man, stirring up his imagination, filling it with brilliant pictures, and fostering in him a love of contemplation and luxurious ease. With this were blended in the Indian character a deep delight in the study of the secrets of nature, an enthusiastic devotion to the native soil, and a leaning to subtle speculation. The old poems of the people, with their high poetic charm, exhibit the first of these traits; indeed, the tender enthusiasm for nature exhibited in Kalidasa's "Sakoontala" betrays a deep sympathy unknown to the other nations of antiquity. But just as nature in India is filled with rude changes and sudden transitions, so is it also with the moral world. Side by side with gentle enthusiasm we meet with unbridled excess; tender love of nature is contrasted with hardness of feeling, which finds striking expression in the caste divisions of the people. This state of things was evidently the result of great historical revolutions, probably connected with the conquest of the land by Caucasian tribes penetrating eastward in ancient times. Not merely the unmistakable difference of races, the strict separation of the subordinate from the ruling castes of priest and soldier, but also the contempt, strengthened by religious maxims, under which the former groaned, imply the relation of a subjugated people to their conquerors. The Caucasian origin of the latter is partly proved by their physical structure, and partly by their language, the Sanscrit; this family forms the most eastern branch of the great Indo-Germanic race, extending over the whole of Southern and Central Europe. The Hindoos, however, afford another illustration of the general truth, that the original character of a people acquires fixed traits in consequence of the peculiarities of climate and the unceasing correlation between nature and the mind; for so powerful has been the influence of nature upon them, that they have never attained that healthy national pride which must exist

before a people can have a history; and, however deep may have been the experiences which they have undergone, these have never lifted them beyond the limits of that purely sensuous existence, modified only by a contemplative and mystical religion, which has grown out of the unchanging and permanent conditions of the nature that surrounds them. But, instead of an impulse to practical activity, there early appears a powerful bent toward the investigation of the spiritual life, to thought, as well as to speculation. Thus their development was exclusively limited to religious matters. In contrast to the polytheistic belief of Brahminism, which, with its spiritless formula, its mechanical works of charity, and depressing creed of an everlasting migration of souls, had corrupted to the utmost the national mind of the Hindoo people, there arose in Buddhism a purer, more human, and more comforting system of ideas. Buddha's appearance occurs between 600 and 540 B.C.; and with him there began in India a more elevated and more deeply excited mental life. About 250 B.C., Buddhism, under King Asoka, obtained the supremacy over Brahminism; which again, after the lapse of some centuries, conquered in its turn, and drove back the doctrines of Buddha to China, Japan, and the great eastern isles of the Malays, where three hundred millions still adhere to this faith.

With the victorious advance of Buddhism, monumental art-creations seem to have begun in India. So far as inquiry has yet ascertained, there is nothing to confirm the belief that so long prevailed as to the extreme antiquity of the existing Indian monuments. The splendid descriptions of palaces and temples in the old epics, the "Mahabharata" and the "Ramayana," which are cited in proof of the great antiquity of Indian architecture, may be considered as interpolations made at a much later period of culture; or, when they are of the original work, they point to slight and temporary structures, gorgeous with color and polished metal, and adorned with stuffs. Indian architectural art seems, therefore, to have really begun with the rise of Buddhism, and, from the very first, to have displayed a style of its own in its magnificent monuments. This style was subsequently adopted by Brahminism, and, aided by more luxurious wealth and more brilliant imagination, produced wonderful results. Even when India in its weakness submitted to the powerful inroads of the Mohammedans, when the old Brahminical cities vanished to make room for the new capitals of the conquerors, still the Hindoo people retained with their ancient religion their native style of architecture; and later, in modern times, this architecture experienced a revival which, in uncouth fancifulness and bombastic overloading, was in no wise behind that of the earlier ages.

2. THE ARCHITECTURE OF THE INDIANS.

The extensive territory of India, the superficial area of which is equal to that of the whole of Europe with the exception of Russia, is covered throughout its various districts—in Hindostan proper as well as in the peninsula of the Deccan, in the rocky mountains of the Ghauts as well as on the coasts of Coromandel, in the highlands of Central India as well as in Ceylon and other islands, in Afghanistan as well as in Cashmere—with an astonishing number of monuments, the common type of which, though with manifold change of form, points to the two great Indian systems of religion. The chief buildings in this inexhaustible world of monuments of the early ages are those which were devoted exclusively to religious purposes, and prove anew how entirely Indian life was confined within this circle of ideas. The earliest known works are some mighty columns which King Asoka erected in honor of Buddhism about 250 B.C., in the Ganges district, near Allahabad, Delhi, and other places. They are all of the same construction, above forty feet high, rising in a tapering form from a base of more than ten feet in circumference, and terminating in a curved capital with hanging leaves (Fig. 77), on which the figure of a lion rests as a symbol of Buddha. The form of the capital, and still more the flower-decoration round the neck of the column (Fig. 78), point most remarkably to a West Asiatic—that is, the Babylonic-Assyrian—influence, which might be traced to Alexander's march of conquest, and establishes to all appearance the surprising fact that the Indian monumental style began with forms borrowed from other nations. If this, however, be the case, still in the earlier Indian civilization, of which undoubtedly we have no certain knowledge, distinct national forms of art must have been already developed, and these Buddhism presently developed into monumental importance.

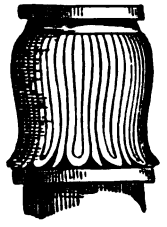


Fig. 77. Capital of the Column at Bhitari.

Fig. 78. From the Column of Allahabad.

The ceremonies of this religious system required especially two principal forms of monumental designs —that of the stupa or tope, and that of the vihara. The stupas are ceremonial tomb-mounds, in which were preserved the relics of Buddha and those of his foremost disciples and adherents; and are often of enormous size. A striking harmony with the conditions of surrounding nature is shown

in the forms of these buildings. The tope is nothing but a tumulus, the most primitive form of monument we know of. For the most

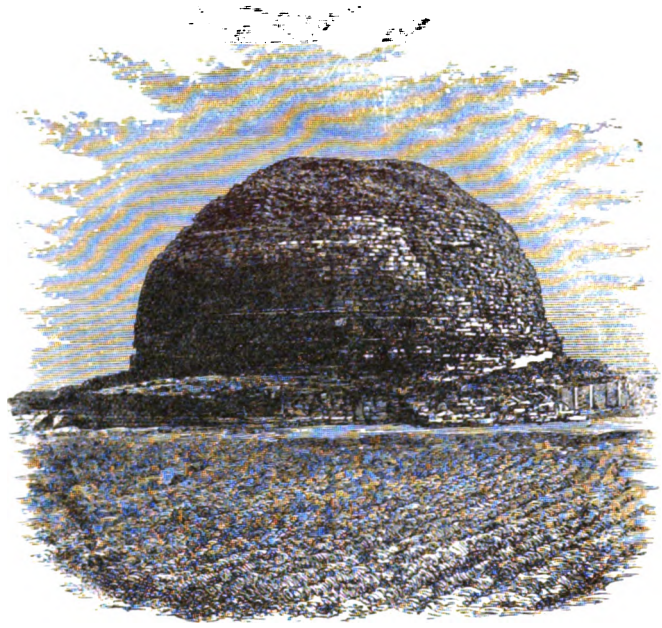


Fig. 79. View of Manikyala.

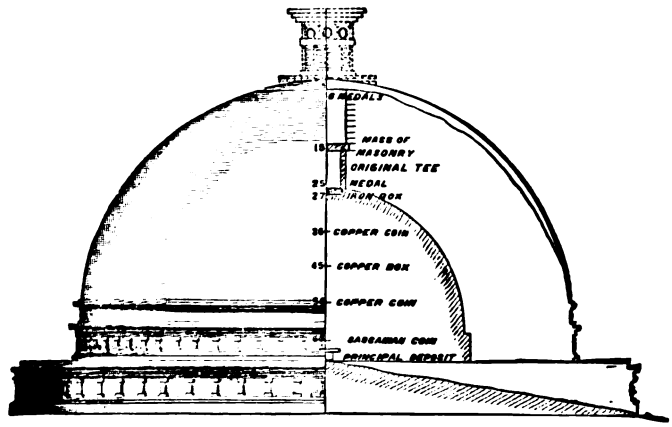


Fig. 80. Restored Elevation of the Tope at Manikyala.

part, it consists of a tower-like structure upon a terrace-like substructure, often scarcely to be distinguished from a natural hill (Figs. 79 and 80). These mounds, which are of very different sizes, are, as a

rule, built of solid brickwork laid in mud, coated on the outside with dressed stone or surrounded by a high stone retaining wall; and, in the more elaborate examples, developing into stepped pyramids

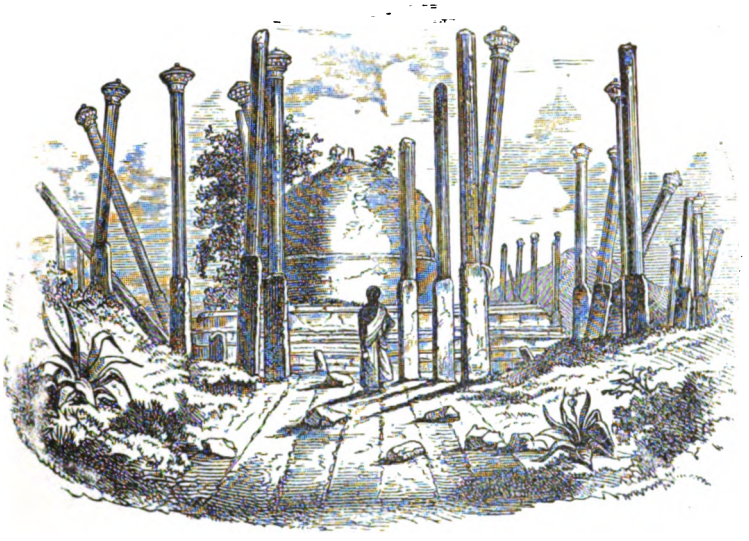


Fig. 81. Thuparámaya-Dagoba.

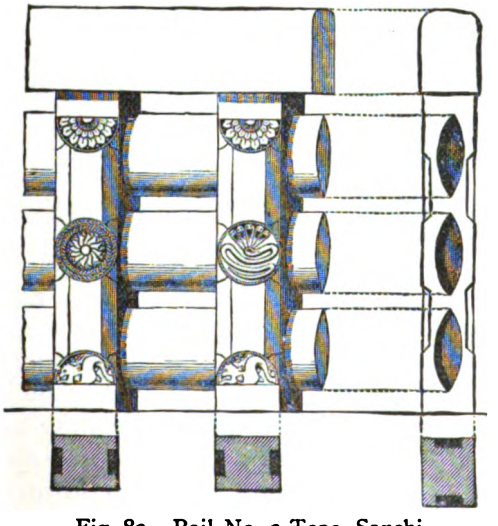


Fig. 82. Rail No. 2 Tope, Sanchi.

of picturesque mass and informal type, supporting an enormous central upright shaft. They all contain small chambers in which the relics were preserved. Hence they also bear the name *dagoba,*

i.e., the hiding-place of the body; or, as it is otherwise explained, the name of dagoba is from *datu,* " a relic," and *garbhan,* " a receptacle," a shrine. Frequently the motive of a higher architectural design is to be found in this original form; the terraces gain in greater circumference and height; the circular building is furnished with cornices and ornamental work; and the whole is often surrounded with slender columns, to which is added a stone inclosure with stately portals. King Asoka is said to have built no less than eighty-four thousand topes and similar buildings in his empire, and to have distributed among these the relics of Buddha—a statement which,

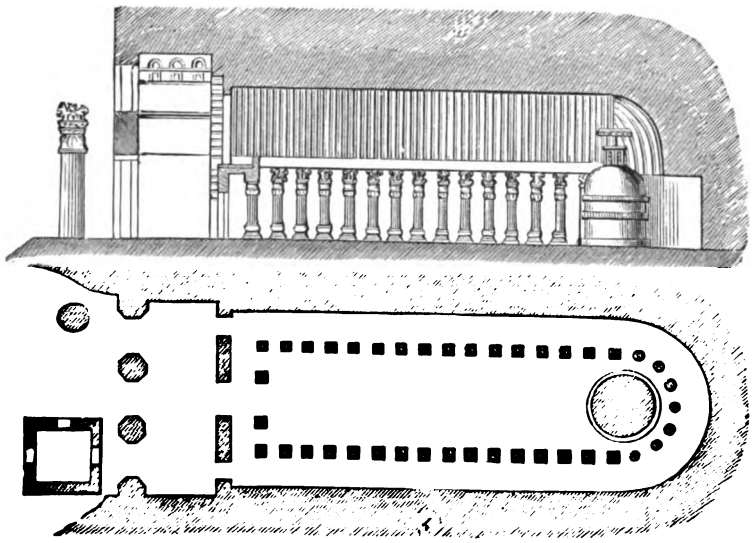


Fig. 83. Cave of Karli. Ground-Plan and Section.

with no doubt some legendary exaggeration, points to the fact of great activity in building. More definite are the reports respecting the buildings erected by King Dushtagamani in Ceylon, about 150 B.C. The Mahastupa—i.e., the great stupa, founded by him, and which is believed to be identical with the existing building known as the Ruanwelli-Dagoba—reaches even now, in spite of its partial destruction, to a height of 140 feet, based upon a mighty granite terrace of 500 feet broad. Especially expressive in form is the so-called Thuparámaya-Dagoba (Fig. 81), in the neighborhood of the ancient capital Anurajapura; it is only 45 feet high, but is surrounded with many circles of slender, reed-like pillars. Smaller in plan are the topes of the Central Indian group at Bhilsa, altogether consisting of about thirty monuments of various size, among the most important of

which are the two topes of Sanchi. The larger, about 56 feet high, with a base diameter of 120 feet, rises cupola-like in several offsets, surrounded by a stone inclosure with four handsome sculptured portals. This inclosure is formed of stone posts; the upper part of the portals is constructed with curiously rounded stone beams (Fig. 82); and the portals themselves are evidently imitations of wooden construction. In this monument the primitive tumulus appears developed in various decorated forms; nevertheless, the capitals of the slender

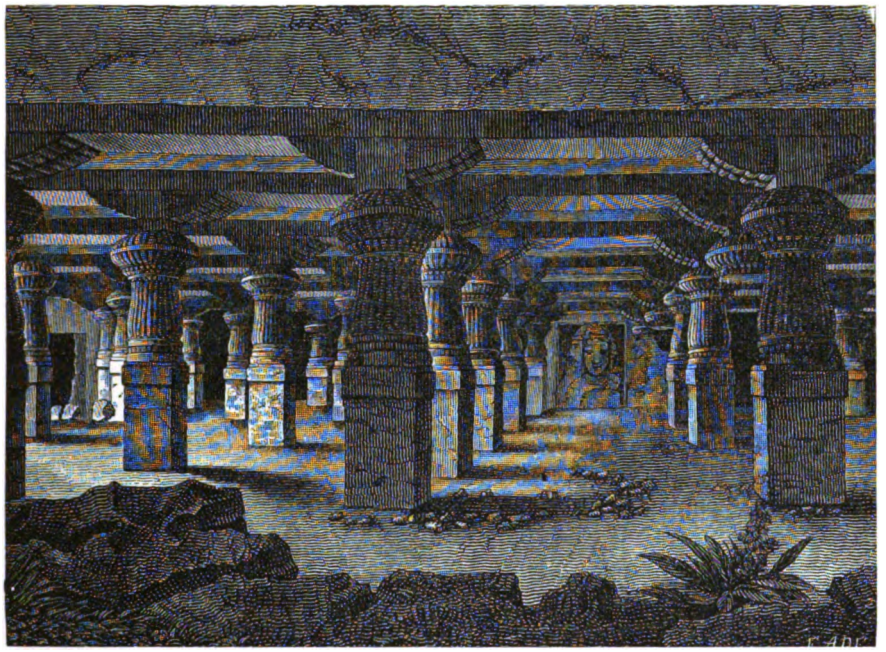


Fig. 84. Cave of Elephanta.

columns which mark the entrance to the principal portals suggest, in their similarity with the triumphal columns of Açoka, the early epoch of Buddhist art.

The vihâras are of an essentially different character. As Buddha had set the example of a secluded hermit-life, his followers repaired to the mountains for pious contemplation, and chose for their dwellings the hollows of the rock. These caves were soon artificially enlarged into those vast excavations in which the wondrous charm of Indian architecture principally lies. Besides these vihâras, with their monastic, cell-like caves, there were other structures of a similar kind, the so-called chaitjas, which, with an almost regularly recurring plan, appear to have been temples. The rock, in most of

these, is hewn out into a long, rectangular cave, terminating in a semicircle at the end opposite to the entrance. Two rows of pillars, or columns, connected by an architrave, serve to support the tunnel-vaulted roof of the broad central nave, in the apparent construction of which carpenters' work has evidently served as the model. At the semicircular end of the building, which strikingly resembles the plan of the Christian basilicas, there rises a dagoba, exhibiting in a niche the colossal image of the deified Buddha. For the rest, as a

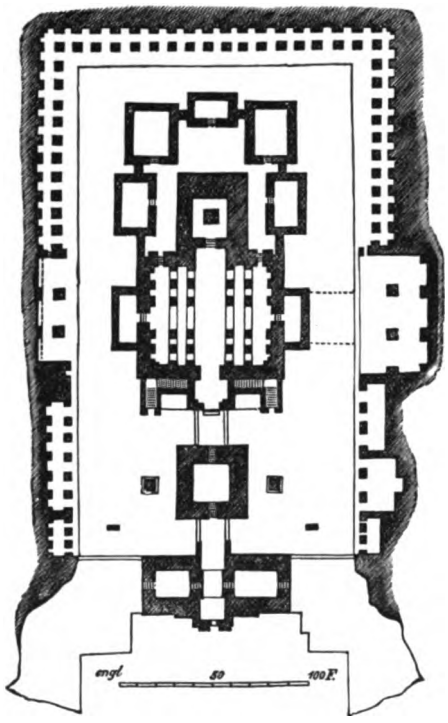


Fig. 85. Ground Plan of the Kailasa Cave of Ellora.

rule, these buildings, in harmony with the spirit of Buddhism, disdain all rich decoration. Among the caves of this kind, that of Karli may be mentioned as one of the earliest (Fig. 83). Others are to be found on the Island Salsette, at Baug, in Central India, and in many other places, mingled with Brahminical works.

Brahminism, indeed, soon vied with Buddhism in the excavation of these temple-caves, and endeavored, by variety in the combination of courts and by exuberant and fanciful decoration, to surpass the Buddhist caves. Splendid monuments of this kind are to be found

in the Island Elephanta, near Bombay; the interior of the principal cave is shown in Fig. 84. The most magnificent works, however, are to be seen in the neighborhood of Ellora, where the mighty masses of the granite mountains have been hewn out in a semicircle a mile in circumference. The temples here often extend in two stories, one over the other; indeed, the superincumbent rock is sometimes removed, so that open temple courts are formed in the interior of the mountains; and in the center of these the principal shrine, with its chapels and its cella, is left standing like a monolithic mass of rock skillfully hewn out. The most splendid monument is the Kailasa Cave at Ellora (Fig. 85), conspicuous both for its extent and for its lavish abundance of sculptured ornament. The whole surface is covered, in fantastic irregularity, with the strange creations of Brahminical symbolism: forms of men and animals in wild complexity and disorder; Atlas-like figures apparently supporting the entablature; lions, elephants, and curiously fashioned composite beings—the whole of this motley life being elaborated with the untired industry of a patient chisel. The architectural members proper also, especially the columns which have to bear the weight of the rocky ceiling, assume the most capricious and varied forms by the fantastic taste of Indian art. As the whole cave system, owing to the direct appropriation of the natural rock, is, in all its forms, dependent upon local conditions, so we also find an absolute arbitrariness in the details. Certain characteristic features in the design of the pillars, however, recur tolerably often; such as a quadrangular base, with a swelling column curved in outline rising above it, and ending in a projecting capital of an extremely bulging form. The pillars are connected by strong architraves; and a console-like member, in imitation of wood, is generally placed between the capital and the entablature (Figs. 86 and 87).

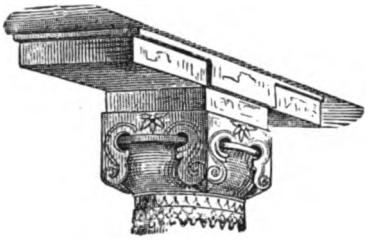


Fig. 86. Capital at Ellora.

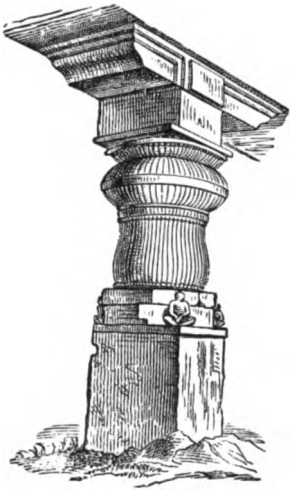


Fig. 87. Pillar at Ellora.

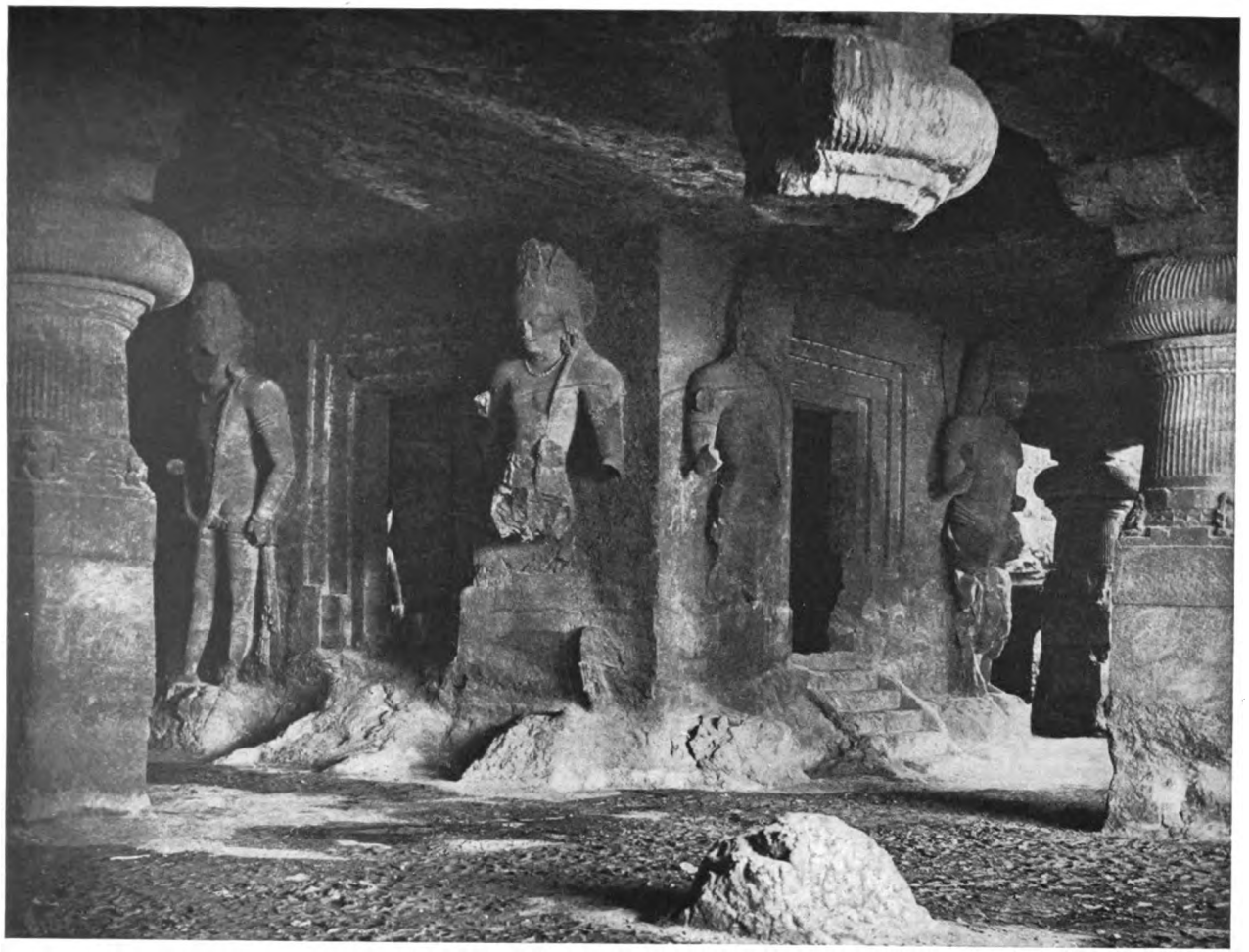
In the Buddhist caves the designs of the pillars are simpler, with a general leaning to an octagonal form.

Besides these buildings, which in countless number and wonderful splendor are spread over the mountains of the Deccan and the numerous islands, Brahminism has also produced a multitude of no less magnificent detached buildings. We refer to the temple structures, the so-called pagodas—extensive groups of buildings, surrounded with vast walls interspersed with stately gates and towers, generally containing several courts with greater and lesser temples, chapels, and other shrines, pools for sacred ablutions, colonnades, galleries, and immense courts for pilgrims (Tchultris). In all these buildings

Fig. 88. Pagoda of Mahamalaipur.

the form of the tope again asserts itself as especially congenial to the national mind; so that gates, towers, and other prominent parts are fashioned in this style. Increased effect is sought to be given to these complex buildings by means of vast extent and bulk: the different parts often rise to a considerable height and in a pyramidal form, several stories with convex-curved roofs being placed one above another, diminishing in size as they ascend, the whole ending in a cupola-like point. Magnificent buildings of this kind are especially to be met with in the southern districts of the Deccan; as, for instance, the mighty Pagoda of Chillambrum, with its four splendid portals; the Pagoda of Mahamalaipur, on the coast of Coromandel (Fig. 88); the famous Pagoda of Juggernaut, built in the year 1198 A.D.;

Rock-cut temple in the Island of Elephanta, south of Bombay. The epoch of these excavations and their elaborate sculpture is not positively fixed; it is of not later than the tenth century A.D., *and good judges have put is as early as* 750 A.D. *The rock is hard and tenacious, as is seen by the hanging mass in the foreground; the capital of a great pier which has been broken away.*



ELEPHANTA

TEMPLES OF ELEPHANTA, BOMBAY HARBOR, INDIA

and others. The purely Buddhist temples have often pagodas of surprising beauty and richness of decoration. (See Fig. 89.)

A separate group is formed by the buildings of the Jainas, a sect between Brahminism and Buddhism, whose splendid but more recent monuments are especially to be met with in Mysore and Guzerat. Extensive courts with arched walls and numerous chapels, and espe-

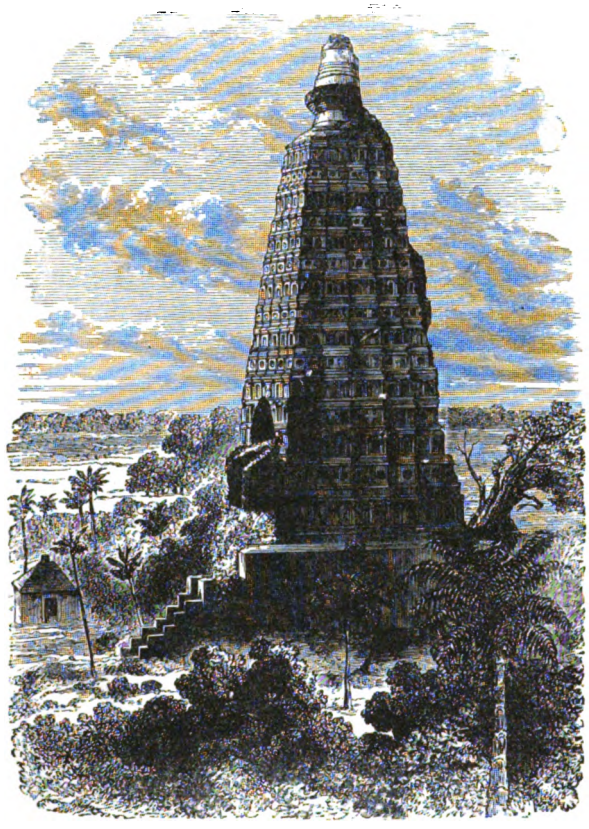


Fig. 89. Temple at Buddha Gaya with Bo-Tree.

cially the constant introduction of cupola-like vaulted roofs, distinguish these buildings, which are conspicuous for their fantastic ornamentation. Many splendid temples rise on Mt. Abu; others are situated at Chandravati; and there is a particularly extensive and magnificent one at Sadree. In all these isolated works there is abundance of rich fantastic ornament; and, although their proportions are more slender, there is the same capriciousness in the treatment of the architectural parts as in the details. Thus in all the varieties of Indian

architecture, extending, as these buildings do, over hundreds of years, the character remains the same. Instead of simple definite forms there is a chaos of wild lines and figures, in nothing inferior to the intoxicating luxuriance, the mighty power of production, and the overwhelming variety of the life of nature in India, and almost eclipsing the wonders of that nature by wonders still more bold.

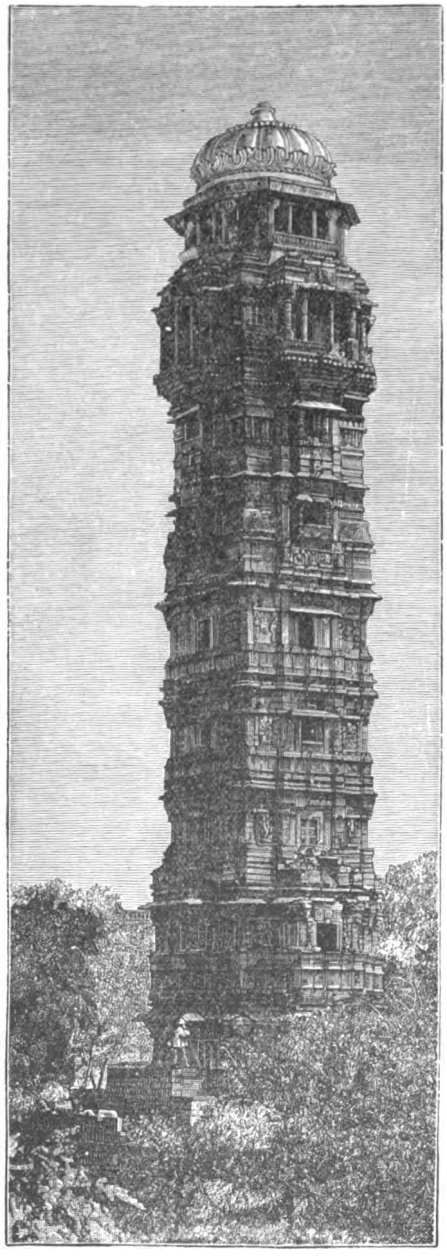


Fig. 90. Tower of Victory Erected by Khumbo Rana at Chittore.

Religious ideas were not less influential in the development of sculpture among the Hindoos than they were in architecture. Buddhism, enjoining as it did a more severe and simple doctrine in contrast to the polytheism of Brahminism, was originally, in conformity with this ascetic bias, averse to sculptured representations; the only exception allowed being that of the figure of Buddha, enthroned in the shrine of the temple cella, or hewn by itself in a rocky niche, such as the statue of Buddha, 120 feet in height, in the rocky wall at Bamiyan, in the extreme west of India. In these figures the expression of deep reflection and profound contemplation is rendered with grave simplicity. It is remarkable, moreover, that the oldest monuments of Buddhism exhibit an attempt at historical sculpture. Thus, for instance, on the portal of the great Tope of Sanchi, there are representations in relief of battles and sieges, betraying a certain degree of lifelike char-

acter and naïve freshness of conception in a chronicle-like style of representation. Historical feeling, however, was so little natural to the Hindoo, that these scanty attempts—witnesses as they are to the victorious progress of the Buddhists, and of a mental life, in consequence, elevated and influenced by outward circumstances—appear somewhat isolated. Brahminism, with its fantastic worship and its strangely extravagant ideas, so entirely swayed the national mind that even Buddhism soon lost its original purity, and mingled with its doctrines the various fanciful creations of Brahminical worship. As, however, the gods of the Hindoos are blended vaguely and variously into one another, from the old national chief divinity, Brahma, who, in conjunction with Siva and Vishnu, formed the

Fig. 91. Relief from Mahamalaipur.

Hindoo Trinity (Trimurti), down through the thirteen lesser divinities and the countless demons and gods of the Indian Olympus, so also sculpture proceeds with uncertain steps in giving shape to these intangible creations. The mysterious and mystical effect of the temple-cave was to be increased by sculptured representations of no less solemn a character. The feeling of the people, however, did not create these sacred images from distinct conceptions, nor from purely human notions, but from dreamy, fantastic ideas, and from mystical speculations. Art is here not merely the handmaid of religion, but the handmaid of a worship which knows no other way to express its ideas of God except by symbols of a monstrous kind. When, therefore, the forms of the gods, or the history of their adventures, were to be portrayed, when mysterious awe of the unap-

proachable was to be manifested, none but material symbolic accessories—a crowd of members, heads, arms, and legs, or fantastic combinations of animal and human bodies—were had recourse to, to aid the vague attempt at expression.

These representations are, for the most part, carved in strong projecting relief on the outside of the topes and pagodas, or in the interior upon the pillars or cornices, and in niches in the wall. The personages of the Brahminical mythology, of the mythical heroic legends, are here combined with free, fantastic creations; there are everywhere symbolic allusions, profound allegories, effusions of a rich, exuberant imagination, but rarely a simple representation of the common events of every-day life, and never, it seems, of historical events. The style of these sculptures, which exhibits certain changes, it is true, in the course of centuries—advancing from severe formalism to greater freedom of action, and at length to wild exaggeration — displays, notwithstanding, a uniform character throughout the whole period. A higher law of artistic arrangement, a clear and simple composition, is not looked for when a chaotic world of unbridled fancy presents itself for plastic representation. In sculptures abounding in figures, there is, therefore, for the most part, that motley confusion which marks the Indian turn of mind; and the more lively and animated the events to be depicted, the greater the confusion. We find it thus in the sculptures of Mahamalaipur, where peculiarly dramatic scenes are exhibited in extensive reliefs (Fig. 91). Whenever, on the other hand, a state of calm existence is to be depicted in smaller spaces and more simple groups, there Indian art often displays a tenderly attractive grace, a delicate sense of nature, and a *naïveté* of feeling, which remind us of the most beautiful passages of the "Sakoontala." Most especially does Indian sculpture succeed in the expression of womanly grace; and even in the conception of male figures there is a touch of this womanly softness. Certainly, almost without exception, there is a lack of energetic life, of a firm contexture of bone and muscle; they are beings rather created for dreamy brooding and soft enjoyment than for the

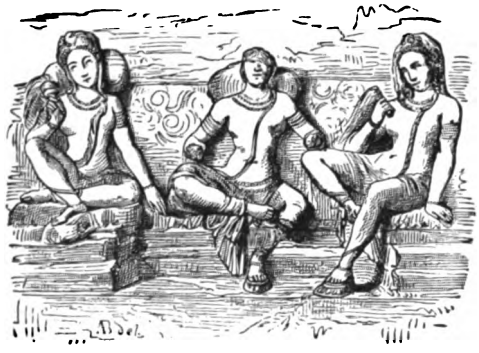


Fig. 92. Relief of Kailasa at Ellora.

vigorous grasping of life in thought and action. In harmony with this, we find full, swelling, luxurious softness in the lines and forms, and easy carelessness of attitude. Striking examples of this tendency are to be seen, especially in the Kailasa at Ellora (Fig. 92), in the principal cave at Elephanta, and in other places.

Painting also appeared at an early period in extensive wall-decorations, as in the caves of Ajunta and Baug, where great processions with elephants, and the figure of Buddha, battle scenes and hunts, are represented in lively colors—red, blue, white, and brown. The figures of the animals especially are freely executed, and with a life-like adherence to nature. At a later period, Indian art turned its chief attention to miniature painting; and works of this kind are often to be met with in European libraries and collections. The old symbolic range of ideas open to Indian art here shows itself to be exhausted, and to exist only in the cold form of tradition. Wherever, on the other hand, representations from actual life, especially scenes of an idyllic kind, appear, the conventional mode of execution is broken through by a sweet poetic feeling, full of great tenderness and grace.

*B.—Lands Near India.**

I. CASHMERE.

So mighty a system of civilization as the Indian must necessarily exercise lasting influence on surrounding nations; and we find, therefore, that, together with the religious ideas of the Hindoos, their art also extended north and south, over the continent and the great groups of adjacent islands. Still there is sufficient freedom of taste to cause various remodelings of form at different points; and, in effecting these, many national conditions and outward influences occur.

One remarkable branch of Indian art is to be found in the extreme northwest, in the mountainous country of Cashmere, famous for its fertility and beauty, shut in as it is between two chains of snowy heights. The numerous monuments of the country belong to the period of the highest prosperity and diffusion of the Brahminical worship. The sacred buildings are, for the most part, de-

* Burke and Cole, "Illustrations of Ancient Buildings in Cashmere"; "Travels in the Himalayan Provinces and in Ladakh and Kashmir," London (Murray), 1841; "Travels in Kashmir, Ladak, etc.," London (Colburn), 1842; "Travels in Kashmir and the Punjab," London, 1845; "Illustrations of the Ancient Buildings in Kashmir," London, 1869. Pouvourville, A. de, "L'Art Indo-Chinois." Hart, Mrs. Ernest, "Picturesque Burma, Past and Present." Raffles, Sir Thomas Stamford, "History of Java."

tached temples, stately in design, with extensive courts surrounded by walls. As in India proper, the form of the edifice in its main parts is based on that of the tope, though not without decided modifications, which show a peculiarly different turn of mind. The principal elements consist, on the one hand, of a distinct imitation of wooden construction, and, on the other, of late Hellenic forms, probably introduced through the Bactro-Scythian lands. While the latter is evident in the formation of the socles, bases, and moldings, and in the tasteless employment of the system of antique columns and beams, the former is to be traced in the general form and in the fundamental design of the structure. The sacred buildings, either of greater or smaller dimensions, rise upon a quadrangular, socle-like substructure, the walls being composed of a rather confused system of columns, steep gables, and niches. The whole is terminated by a roof rising pyramid-wise in several offsets; and the straight lines of this roof, in contrast to the full, swelling form of the monuments of Hindostan, call to mind most decidedly the effect of wooden constructions. A temple such as this is to be seen at Payach (Fig. 93), one of the smaller buildings, but interesting from its characteristic design. A larger temple, with adjoining buildings, court, and walls, is to be found at Martand; and several, partly destroyed, at Avantipur. Sculpture has also been employed upon these monuments, but without attaining to any special importance.

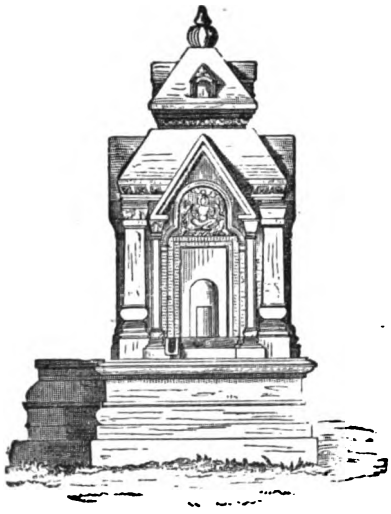


Fig. 93. Temple at Payach.

2. NEPAL, JAVA, AND PEGU.

The other lands of this extensive region of civilization are chiefly, or even exclusively, under the influence of Buddhist ideas. Among them we may name, in the first place, the mountainous country of Nepal, lying in the north of Hindostan, and stretching away close under the loftiest snow-peaks of the Himalayas. Here the original Buddhist dagoba is developed into a vast detached building, combining, amid much fantastic decoration, the rich and varied forms

of Indian architecture, with bold, tower-like slenderness. Especially the temple, which here is designated exclusively Chaitja, presents a striking example of this form, with its richly decorated substructure, wall-niches, and slender-pointed cupolas. Still more toy-like, and inclining toward the Chinese style of architecture, are the cloister-like vihâras. The most conspicuous monument of this class seems to be the great temple of the capital Kathmandu. The sculptures with which these monuments are richly decorated exhibit a mannered imitation of the Buddhist sculptures of Hindostan. The Nepalese

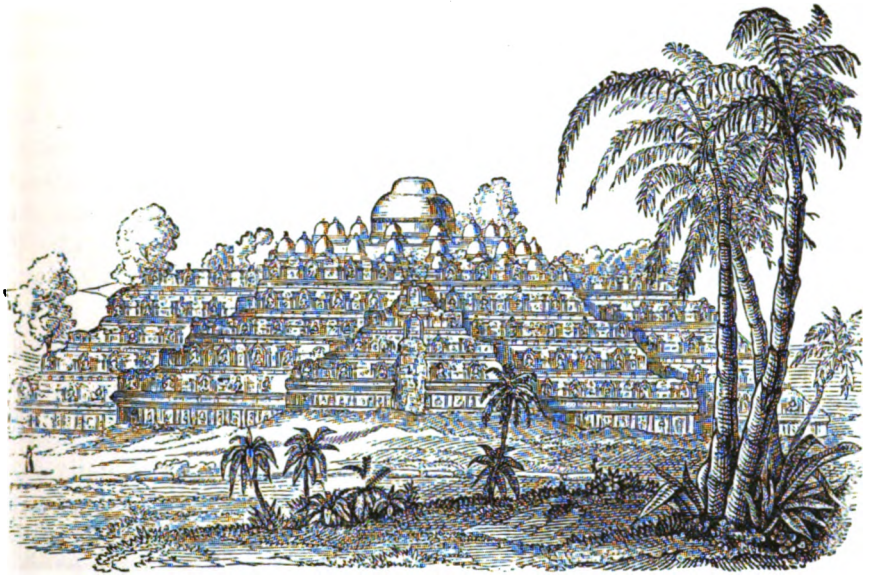


Fig. 94. Temple at Boro Budor.

evince especial skill up to the present day in the working of various metals.

In the monuments of the Island of Java, which belong to the later period of Indian art, Buddhist and Brahminical forms are frequently combined into a grand and richly developed whole, which, with all its fantastic ornament, attains to an imposing dignity of effect. The circular form of the dagoba is frequently employed to crown the mass of the exterior, the walls of which are subdivided by means of a rich system of niches. Among a great number of splendid buildings, the Temple of Boro Budor is preëminent for magnificence and extent (Fig. 94). The principal temple is a mighty structure 526 feet wide, rising terrace-like in six stories to a height of 116 feet, each offset having niches containing sitting statues of

Buddha and an arched roof, and the whole being crowned with a number of cupolas, in the center of which an immense dagoba towers above all. Sculpture also, in Java, follows in its peculiarly rich detail the model of the Indian, in common with which it exhibits a fondness for fantastic device and an especially graceful treatment of form. The sphere of representation is composed of Buddhist and Brahminical elements; and the material employed is not only stone, but metal, which is worked with skill by the Javanese artisan.

A third group, again following more exclusively Buddhist traditions, is formed by the monuments of Pegu, the region watered by the Irrawaddy in Farther India. Here, too, we find the dagoba again as the primitive form, but, for the most part, massive in structure, and of mighty dimensions. Yet here a new variation appears, in an octagonal building, tapering into a slender point, rising from a broad substructure. Splendid colors and rich gold ornament, besides colossal bronze statues, for the molding of which Peguan art was distinguished, increase the fantastic grandeur of these buildings. The best-known monuments are the Temples of Rangun, Pegu, and Kommodu, the latter being about 300 feet high.

3. CHINA AND JAPAN.*

Chinese art, so far as it was employed for religious objects, likewise received its impulse from Buddhism, which began to spread through the vast empire about the year 50 A.D., and gradually acquired exclusive sway. As, however, the character of this soberly intelligent, and practically wise people, with their preponderating attention to worldly aims and gains, is diametrically opposite to the religious, mystical, and poetic mind of the Indians, we find the forms of art considerably modified, the evidence of deep symbolism and grand seriousness effaced, and in its place an effort after well-arranged elegance and varied ornament. Here, too, only still more decidedly than in other Indian architecture, there is a preponderance of wooden construction; or the idea of it is, at any rate, perceptible everywhere.

In the Chinese temples there is an unmistakable adherence to the dagoba form, although radically modified (Fig. 95). Most of the

* Anderson, W., "Pictorial Arts of Japan, with Remarks upon the Pictorial Arts of the Chinese and Koreans." Conder, Josiah, "Landscape Gardening in Japan." Daly, "Les Temples Japonais," in *Revue de l'Architecture*, 1886-7. Conder, Josiah, "Domestic Architecture in Japan"; "Further Notes on Japanese Architecture," *Transactions R. I. B. A.*, 1886-7. Gratton, "Notes upon the Architecture of China," in *R. I. B. A. Journal*, 1894-5. McClatchie, "The Feudal Mansions of Yedo," vol. vii., part iii., *Asiatic Transactions*. Morse, "Japanese Homes and Their Surroundings."

small buildings diminish in size at every story; so that each succeeding story recedes behind the concave roof of the one below. A gallery of brightly varnished wooden pillars, often filled up with gilt trellis-work, surrounds the lower floor. Fantastically twisted carved work, especially the figure of the fabled dragon, ornaments the projecting rafters; and the never-failing multitude of little bells, suspended at every point, complete the childishly playful character of these buildings. The slender tower also, so great a favorite with the Chinese—the so-called Tha, which rises in many stories to a tapering point, always the same in plan and decoration, may be regarded as an offspring, though a remote one, of the Indian tope. The most famous of these towers was the porcelain tower at Nanking, which rose to above 200 feet high in nine stories, and which was destroyed in the Taiping Rebellion of 1850 (Fig. 96). The walls were sheathed externally with bricks and tiles of varied form and color; and this brilliancy of permanent color and the rich gilding were the characteristic features of this building, as they are of most others of a similar design (Fig. 97).

Noteworthy are the triumphal gateways, called Pae-Lu, peculiar to the Chinese, and erected by imperial order in honor of especially deserving citizens. They are placed in the public streets, forming either a single or threefold passageway, resembling in so far the Roman triumphal arches. Their model and construction are based upon plain timber-work: two—or, in the case of richer structures, four—wooden posts, for which occasionally stone pillars or bronze columns are substituted, being erected and bound together on the top by several lintel bands (Fig. 98). On these is inscribed in golden characters the name of him to whom the honorary monument is dedicated. The crowning was formed by far-projecting, concave roofs, decorated with dragons and other fantastic carvings peculiar to Chinese art. The relationship between these singular structures and the Indian portal-frames—as is shown, for instance, in the Tope of Sanchi—cannot be denied.

A more serious feeling is exhibited in those buildings of the Chinese which are adapted to useful purposes, most of which belong to their early epoch of civilization: the extensive canals, the bold bridges, and above all the famous "Chinese Wall," which extended about 400 miles, with a height and breadth of 52 feet, fortified by numerous towers of defense, and which was built about 200 B.C. for the protection of the northern frontier of the Empire.

The subject of Chinese architecture, however, has not been thoroughly studied. Monuments exist of which we know little, and others are known to have existed of which the remains are not iden-

tified. The beautiful buildings of Japan, known to have been largely studied from Chinese models, lead us to expect much from a fuller study of the buildings of the older and greater empire.

Domestic buildings also are built in a very practical way, with well-burned bricks so arranged in the wall that relatively large cells or air-spaces are reserved guarding the interior against damp. Still, by far the most interesting work of the Chinese is in the way of framed structures of wood, and of those large bamboos which from time immemorial have been in use in the warmer regions, and are planted and preserved throughout the Empire. The system of framing is very different from that used in Europe. Further allusion is made to this under the head of Japan. Japan also has taken over from the older civilization the heavy curved roof, which counts for so much in the artistic design of the buildings.

Fig. 95. Chinese Temple.

The decorative art of the Chinese is singularly rich in color. They excel all other peoples in their skill and versatility in pottery of all sorts; and also in the use of strong and positive color in flower patterns, diaper, and the like. Hence the decorative effect of an interior is often of extreme variety, and of a rich delicacy—carved wood, embossed lacquer and metal, inlays of ivory and colored substances, silk, embroidery, and painting all combined in a singularly perfect harmony. It is to be observed that there existed as early as the twelfth century of our era a great school of artistic painting, in which landscape and figure design were combined in a very imaginative way. Specimens of this ancient art are rare, and command enormous prices in Europe and the United States; and it appears that with the Manchu conquest in 1644, and the complete subjugation of the Chinese to Tartar conquerors of inferior civilization, this with the other great arts of China began to decay rapidly. The sense of design in flower painting, and of perfect craftsmanship in porcelain, enamel, textiles and embroidery, has, however, lasted to our own times.

The arts of Japan are recognized by the Japanese as being originated partly in China, partly in Corea. The buildings which are the most reverenced, and which are known to date from the seventh century of our era, are ascribed to Corean artists. These are the temples and other buildings which make up the monastery of Horiuji near Nara. But the monastery of Yakushiji in the same part of the country, and hardly later in date, is thought to have been built by Japanese architects. These buildings, like all the pagodas or

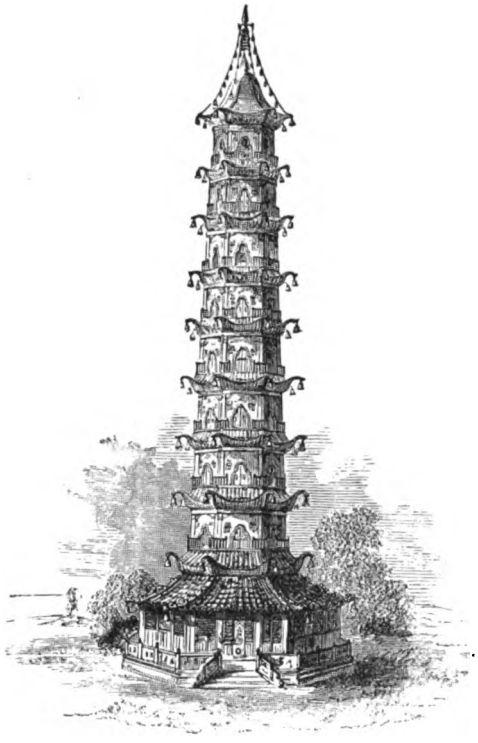


Fig. 96. Porcelain Tower, Nankin.

tower-like buildings, and also the lower and broader buildings of the temples, are of timber, the construction being simple and logical, and adapted, as experience proves, to the longest duration. It is commonly said that the prevalence of earthquakes in Japan has caused this adherence to the almost exclusive use of timber for their more elaborate buildings. Stone masonry is used chiefly for fortress walls and similar low and massive structures; and as the Japanese have no quarries of good stratified stone easily

extracted in square blocks, they use the igneous rock of the country in the forms that it takes naturally or readily, and there has developed from this a curious polygonal structure similar to that of the so-called Cyclopean or Pelasgic work of the prehistoric races of the Mediterranean.

In all Japanese buildings, as in those of China, the roof is of

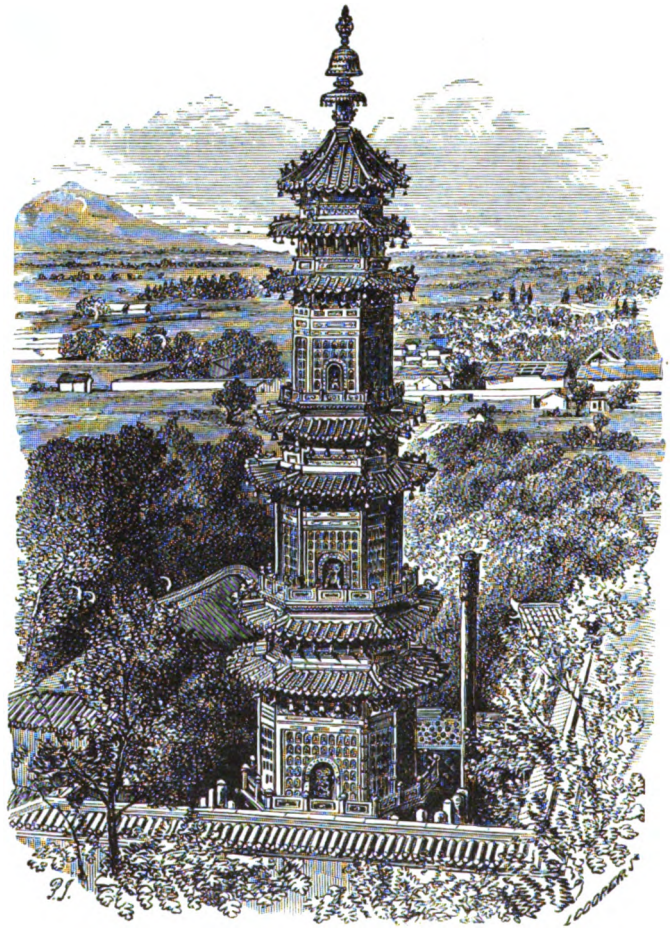


Fig. 97. Pagoda in Summer Palace, Pekin.

extraordinary importance. It is in fact what the wall is to Europe —the chief center of thought and artistic consideration. As the European architect lays out his windows and doors, or arranges for the partial substitution of a row of columns or piers for a massive wall, so the Japanese studies the proportions of his roof, its

pitch, its relative height, its relative projection, the exact curves of the eaves, and the texture, the modeling, and the color of the roof-covering itself. The vertical repetition of many roofs, those of verandas or balconies repeating the curves and the colors of the main roof, is characteristic of Japanese architecture even more decidedly than we have found it in China. Thus, the pagoda of Horiuji has four accessory roofs—that is, roofs projecting like those of verandas from the upright sides of the building—and a final roof at top which is crowned by a lofty tee. These roofs being nearly of the same horizontal dimensions, repeat one another, and emphasize notably the tower-like character of the mass. Foreigners

Fig. 98. Chinese Pae-Lu.

who have studied the changing styles of Japan find the native students right in their discrimination betwen the earlier and later styles. Thus, the arts of the Tokugawa dynasty, beginning in 1600, are admittedly inferior in refinement to those of earlier times, however rich and sumptuous the decoration of the later time may be; and the roofs of a sixteenth-century temple are seen to be less perfect in composition than those a thousand years earlier.

Domestic architecture in Japan is an affair of frame buildings with broad, overhanging roofs and very little permanent side wall. Sliding screens, usually of tough and fibrous paper strained upon wooden frames, form the outer walls as well as the partitions for at least half the extent of the building, and therefore the architectural character is apt to be that of a heavy roof supported on separate pillars

of comparatively slender and unarchitectural appearance. Extreme neatness of finish and a delicate use of the natural grain of the wood, with a very reserved and moderate use of slight decoration in color, are characteristic of these domestic buildings, even when belonging to the wealthy; but a few instances are known of buildings built expressly for ceremonial, in which the interior is as rich in carving and in color as one of the exquisite cabinets or boxes which are brought from Japan and sold in Europe at enormous prices. Such a room is that of the memorial building at Nikko, erected in memory of the founder of the Tokagawa dynasty, Ieyasu. The color-sense of the Japanese has always been different from that of the Chinese, for whereas the last-named great people retained more than others the secret of the combination of strong red, blue, dark green, light green, white, and yellow, the Japanese have always

Fig. 99. Chinese Painting.

shown a marked tendency to design in different tints of gray and different combinations of golden brown with dull red. The decorators of both countries use pure or brilliant gold in a reserved fashion as a useful means of harmonizing other colors; but with the Chinese it is commonly in small surfaces, narrow lines, and the like, whereas the Japanese use it in wrought and embossed patterns with extraordinary effect—the gold, even when uncolored and left with its natural metallic brilliancy, never seeming garish because of the elaborate light and shade produced by the modulation of the surface. This decorative sense the Japanese carry into the smallest objects of daily life, and utensils of low price are made beautiful partly by a certain spirited diversity of form incompatible with the European way of manufacturing such utensils in large quantities, and coming directly from the handwork applied to the vessels, pot-

tery, wood, and metal; and partly from an infallible sense of color-harmony of a more grave and unobtrusive sort. The box or tray used by a poor family will seem to our Western eyes as tasteful, and as impossible for us to equal in its own way, as the costly lacquer inlaid with pearl and with incrusted patterns in wrought metal which comes from the palace of a provincial noble.

In the loftiest forms of fine art the Japanese have never equaled the Greeks and the direct successors of the Greeks in Europe, in so far as the treatment of the human figure is concerned. On this account their sculpture, although of immense decorative importance and of ceaseless interest to Western students, cannot be said to rank with even the sculpture of modern Europe in its less successful developments. In painting, however, the Japanese schools —strongly traditional, based upon a constantly renewed observation of nature, and yet restrained by the severest laws of design— have produced an overwhelming effect upon European students since the first complete opportunities were offered for the study of these arts, about 1865. The paintings of Japan are usually mounted on silk and paper, and kept rolled until wanted for display, when the roll is hung against the wall; but a few even of the large ones are stretched on mounts; and the smaller paintings, and the extraordinarily clever and brilliant sketches in color and in black and white, are commonly mounted in beautiful albums, in which the pure and carefully laid color seems to be proof against the injuries of time. The greatest artists of Japan have lent themselves also to reproduced and easily multiplied work in the way of woodcuts and the like, some of which are painted in outline in cheap popular publications, while others are printed in diverse colors according to a process not indeed unknown in Europe, but hardly practiced there except for a brief moment in the eighteenth century. This process is, in the main, that of painting the block or plate by hand with all the colors that are to be used in one print, and then taking the print before the colors dry. This operation is repeated for every separate print, and therefore no two prints are exactly alike. The difference between this and the ordinary color-printing of modern Europe with a separate block or stone for each color is obviously very great.

The Japanese people seem to possess a special gift for drawing and painting, and they produce excellent things in the representation of given forms of nature. The feeling which European students confess to, on first beginning the examination of this art, is that the inferior or simpler creatures—insects, fish, and birds— are perfect in their representation, whereas the larger beasts are less

well drawn, and man least of all. This inferiority of realistic merit in the higher forms comes of the traditional and strongly decorative significance of the whole system of design. The true characteristics of a bird or a fish can be reproduced in a drawing which is of primarily decorative purpose; whereas the human form, when conventionalized to the admitted standard of design, is to Europe insupportably strange; and this not because the figure is necessarily ill drawn, but because the conventions of Europe and of the East differ so widely. Even a wholly realistic drawing, as of people at work in the fields, is remarkably different in Japanese work of the eighteenth century and in contemporary work of France or Germany; and of the two, the Japanese work of this particular epoch comes nearer to the actual facts of life. But as the European system of perspective, and the European idea of what to give and what to omit, differ from the kindred ideas in Japan, so does the work itself seem strange to those who are accustomed to the other set of conventions.

SECOND BOOK.

GREEK ART.

Chapter I.

GREEK ART.

1. *Land and People.**

IN the vast regions of the East we have found forms of civilization growing up along the course of mighty rivers, which have struck us as strange from their enduring stability and unchangeableness. The first step we take on entering the European continent brings us into a new world, full of activity and fresh historic life, in which we at once are sensible of a home-like feeling. The Greeks are the first to afford to the European the picture of personal inner development and of progressive national life. While these Oriental nations, in their unfamiliar civilization and ways of thought are only of interest to the student of history among Europeans, the Greeks, on the other hand, reached what is for us an absolute height of culture, presenting a model worthy of admiration for all ages, and an inexhaustible fountain-head for all higher effort. Although thoroughly national, their whole mental life was so elevated, so filled with universal human significance, that it furnishes an indestructible basis for the development of all future ages; and in the everlasting struggle of the beautiful and the true with their antagonistic principles, Greece, like an Athene Promachos, has victoriously preceded all champions of these nobler qualities. But when we consider that the Greek race was only a branch of that great family of Asia from which the Indians and Persians were descended, and that this consanguinity is unanswerably proved by the testimony of language, the question suggests itself, why it was that this par-

* Boetticher, Karl, "Die Tektonik der Hellenen." Durm, "Die Baukunst der Griechen," from "Handbuch der Architektur." Penrose, F. C., "An Investigation of the Principles of Athenian Architecture." Pennethorne, John, "The Geometry and Optics of Ancient Architecture." Perrot and Chipiez, "Histoire de l'Art dans l'Antiquité"; vols. vi. and viii. Collignon, Maxime, "Histoire de la Sculpture Grecque." Furtwängler, Adolf, "Masterpieces of Greek Sculpture" (translated from the German of "Meisterwerke," etc.; New York, 1895). Mitchell, A., "History of Ancient Sculpture." Overbeck, "Geschichte der Griechischen Plastik." Choisy, "Histoire de l'Architecture." Brunn, H., "Geschichte der Griechischen Künstler." Lübke, W., "The History of Sculpture" (Bunnett's translation, London, 1872).

ticular branch, which we know under the name of the Greek, should have so far surpassed all other nations of similar origin in all that most interests the European world. In order to understand this, it will be necessary to study carefully the nature of the country.

Separated from the northern regions by mighty chains of mountains, the territory of the Hellenes, the most southern point of Europe, stretches out toward the African and Asiatic continents, closely connected with the latter by the numerous islands of the Ægean Sea. Small as the land is in extent, it nevertheless displays a variety of surface and of coast-line such as is possessed by scarcely any other country in the world. Traversed by numerous mountains, which ramify in various directions, and project far into the sea with their headlands, the country consists of a great number of independent territories, separated from each other by these lofty ridges, and opening to the sea by broad and deep inlets. This infinitely rich individualizing of the surface at once suggests that here, if anywhere, scope was afforded for an analogous development of human existence. Nature, too, was here softened to the mildness of a southern climate, moderated by sea and mountain air; and the soil, far from tropical luxuriance, stony and barren in certain portions, heaped its fruits into the lap of man only as the reward of his laborious toil. Bearing all these influences in mind, we shall comprehend how a people dwelling for centuries in such a region would gradually develop such a character as we find in the Greeks. When, far back in time, the ancestors of the Hellenes, crossing, as is probable, the Straits of the Bosporus, spread over the land, they brought with them the civilization of the East, as it then existed, in language, manners, and religion. But having once reached the new theatre of their activity, the peculiar nature of the country asserted itself in them, and, after a long series of progressive stages of development, helped them to attain that height where they appear before us as a new people, thoroughly independent and peculiar.

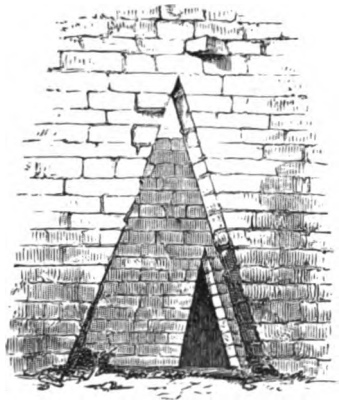


Fig. 100. Doorway at Missolonghi. (From Fergusson.)

This correlation between civilization and topography, which is unmistakably proved as the result of all archæological investigation, has been frequently overlooked; and thus the most various and

erroneous hypotheses have been advanced with regard to art. It has been thought necessary either to deny all connection between the Greeks and the East, or—and this especially recently—to regard the Greeks as servile imitators, at any rate as disciples, of the Egyptians and Asiatics, since from superficial examination a number of Greek forms of art seemed to be directly traceable to Egypt or to Asia Minor. So certainly, however, as the Greeks have independently developed the genius of their language from the common basis of the primeval stock; so certainly as, in their religious ideas,

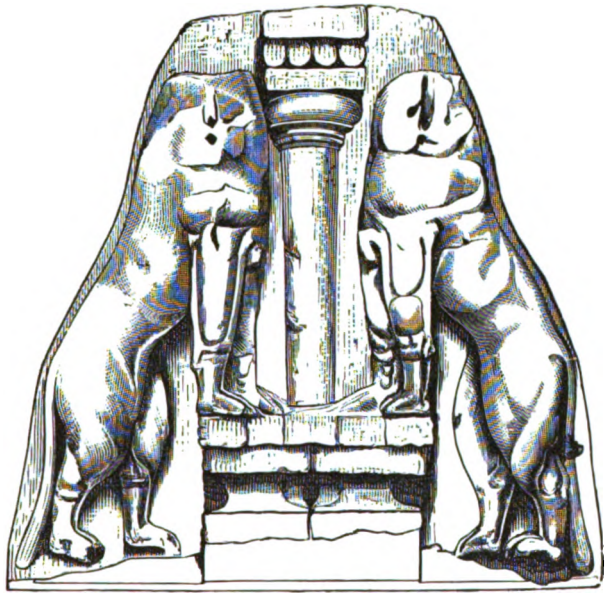


Fig. 101. The Lion-Relief from the Gate at Mycenæ.

the wild and fantastic conceptions of Deity prevalent in the East have been transformed to such clear and distinct notions that the original fundamental idea common to all only gleams faintly through them; just so certainly, in their forms of art—so far, at least, as our historical knowledge can penetrate—each characteristic trait is genuinely Hellenic. Only in certain forms belonging to the Greek archaic period do we trace the influence of Oriental art, transmitted to the ancestors of the Hellenes by the trading Phœnicians. This is the case with the capitals of the columns and with certain ornamental details of the Ionic style, which seem to come from Babylonic-Assyrian models. We find this also especially in the earliest Greek paintings on vases, where the mannered style of animal forms and

the fantastic figures harmonize most with the works of Babylon and Assyria.

The earliest epoch of Grecian history exhibits, therefore, a flourishing condition of culture, which plainly has its coloring from

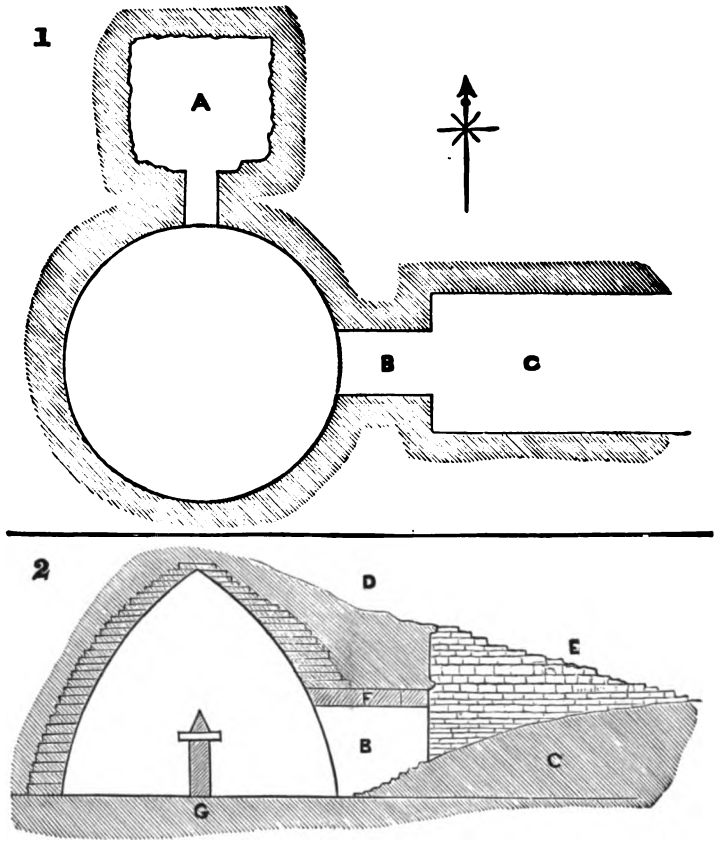


Fig. 102. Plan and Section of the Treasury of Atreus at Mycenæ.
1. Plan of the Treasury of Atreus: A, rock-cut chamber; B, doorway; C, approach.
2. Section of the above; B, doorway; C, approach filled up with earth; D, slope of the ground; E, wall on north side of approach; F, lintel stone; G, door to rock-cut chamber.

the East, although with distinct modifications. We find the country in the possession of a certain number of families, who exercise their dominion in a patriarchal manner. Yet the people do not seem subject to them with Oriental subservience; but a council of elders is convened for deliberation and decision. Warlike undertakings, such as the Argonautic expedition and the war against Troy point to the Oriental world; and even the peaceful relations of civ-

ilized life suggest a close connection with the East. When Homer mentions costly and splendid materials, excellent woven stuffs, or ingenious metal-work, these always proceed from Phœnician or Sidonian men; and whatever evident traces of that period have come down to us reveal to us the prevalence of a taste for Oriental form. Even the later Greeks, who were separated by a mighty revolution from that earlier state of things, appear to have regarded the works of that period as somewhat foreign to themselves, and were wont to designate them as "Pelasgian." But however numerous may have been the conjectures and disputes of learned investigators as to the origin and importance of the old inhabitants of Greece, the Pelasgians, so much seems to be certain, that the form of culture designated by their name spread uniformly in Greece, Italy, and in the islands of the Mediterranean Sea.* We shall refer to it again in our examination of early Italian art.

Fig. 103. Fragment of Pillar in front of Tomb of Atreus at Mycenæ.

The artistic works which have been preserved in Greece exhibit that taste for the huge and monumental which belongs to all primitive epochs of art. For the most part, they are the remains of fortresses belonging to that heroic age, rising threateningly over the plain upon precipitous and rocky heights, and which inclose kingly residences. The walls, which are of immense thickness, are formed of huge, irregular polygonal blocks, carefully fitted together, formerly supposed to be built without the use of mortar, yet with an extremely firm bonding of the stone, aided, as we now know, by filling the crevices with mud or some mixed mortar. Later additions to the height of the walls are sometimes of more regularly dressed stone. Many remains of this kind are to be found at Argos,

* See the article "Pelasgic Architecture," by Professor Frothingham, in the "Dictionary of Architecture and Building"; Macmillan Co., New York, 1901.

Tiryns, Mycenæ, and other places. Passages and galleries opening toward the outside are frequently connected with them, roofed over by means of the primitive device of projecting layers of stone (Fig. 100).

Thus, in the southern and eastern walls of Tiryns, where a series of chambers intended for storerooms and connected with galleries are reserved in otherwise solid walls, these walls measure about thirty-six feet in thickness.* It is noteworthy that the same disposition recurs in the walls of the Byrsa at Carthage, except that this is more carefully and regularly built. Something similar is to be observed in an archaic fragment near Missolonghi. In these cases the chambers and passages are roofed by successively projecting courses of stone, each acting as a corbel course. This kind of roofing is employed on an immense scale at entrances, as at Amphissa and Phigalia; while at other gates the sloping side-walls are con-

Fig. 104. Details from the Treasure-House of Atreus.

nected by a huge stone beam (lintel) above which, however, a triangular opening is left for the relief of the lintel, which would otherwise break under the pressure.

The most important instance of this kind is the principal gate of the Acropolis at Mycenæ, important for the famous sculpture placed above the principal lintel (Fig. 101). The triangular opening over the doorway, which serves as a discharging arch, is filled by an immense slab of limestone ten feet high. Against the centre of this slab, upon a pedestal, stands a pillar somewhat smaller at the bottom than at the top; and on both sides, in strong relief, stand two lions erect, with their forefeet resting on the pedestal. The heads, unfortunately destroyed, were probably turned sidewise and facing outward, and may have been of metal.

The style of these earliest known European sculptures approaches most nearly to that of the old Assyrian works: the natural forms are

* Cf. Schliemann's "Tiryns"; Leipzig, 1836.

not unskillfully grasped in their essential elements; and with this is combined a strict regard to the architectural design, especially shown in an ingenious adaptation to the space to be filled. The forms of the column and its base seem also to suggest the influence of Asia Minor (Fig. 103).

This relationship appears still more distinctly in another famous monument of Greece, likewise belonging to the old capital Mycenæ —the building generally styled the Treasury of Atreus, but which is probably a burial vault (Fig. 102). It is a circular subterranean apartment, about forty-eight feet in diameter, and as many in height, the stones of which the walls are built being placed in such a manner

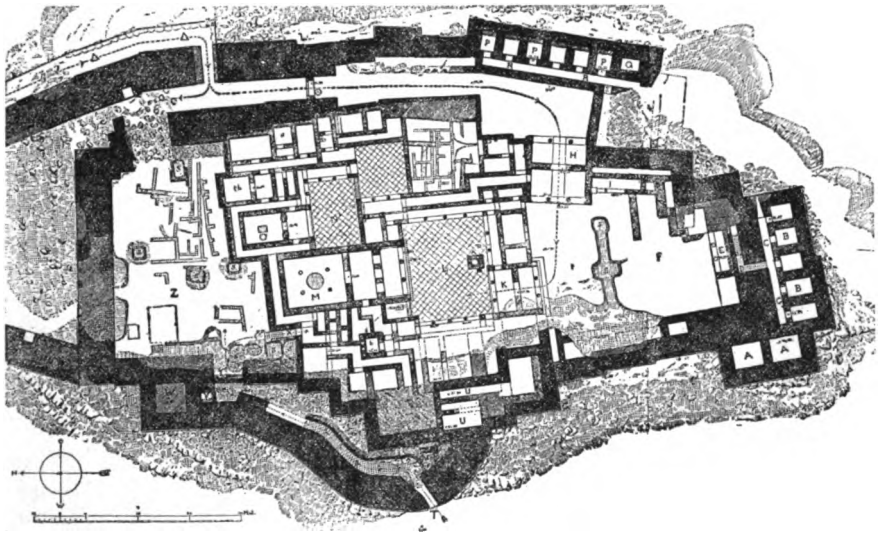


Fig. 105. Ground-plan of Palace at Tiryns. (From Schliemann's "Excavations," S marks the shafts sunk in 1876,

that the section shows the form of a pointed arch. The stones that form this bee-hive shaped chamber are all in horizontal courses. They act, not as the voissoirs or wedged-shaped solids of a true vault, but as courses of corbelling; and the curved shape is entirely for effect, having nothing to do with the construction. A cubical apartment hewn out of the rock (Fig. 102), and possibly intended for a burial vault, opens out of the north side; while in the larger apartment the rich treasures of the ruling family were perhaps preserved. The lower parts of this room appear to have been covered with metal plates. If we connect with this the descriptions of the royal palaces in which Homer loves to indulge, where the walls,

thresholds, doors, and pillars glittered with brass and precious metals, the resemblance to the customs and art of Asia Minor becomes still more evident. The peculiar remains of architectural decoration also, and the fragments of two engaged columns found near the entrance to the treasury, would likewise seem, from the weak form of their members and their want of sharpness, as well as from the playful character of their ornamentation, to betray an Oriental influence (Figs. 103 and 104). The spiral and undulatory decoration of these fragments at once reminds us of the ornaments on the earliest bronze vessels which are found among the Celtic races.

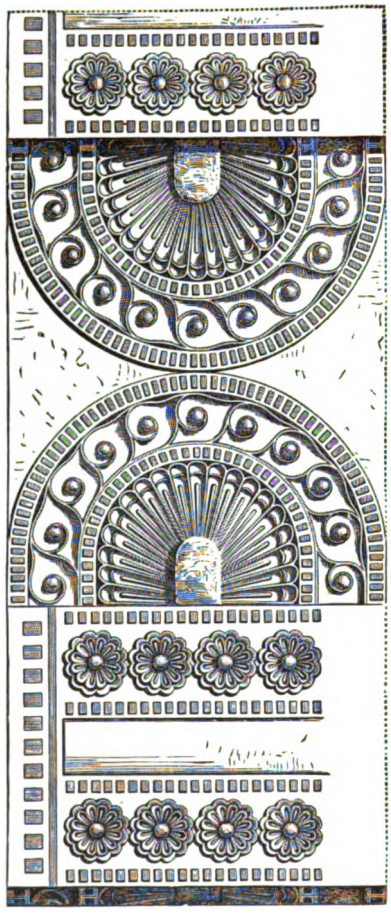


Fig. 106. Alabaster Frieze from Tiryns. (From Schliemann.)

Similar in its disposition of parts is a second bee-hive tomb, which was first excavated by Madame Schliemann, near the Lion-gate, and which seems more ancient than, and is inferior in size to, that more famous one. More important, however, is a large bee-hive tomb, generally indicated as the treasure vault of Minyas at Orchomenos.* Here also we find many traces of the surface having been decorated with metal-work, and in the adjoining rectangular rock-chamber there is a ceiling whose splendid plastic decoration, with its rosettes, spirals, and conventionalized flowers, is suggestive of those carpet-like decorations of Assyria and Egypt. Many similar ornamental motives are found in Egypt, particularly in the painted ceilings of the Theban tombs. Several other bee-hive tombs near Mycenæ are still unexcavated. Simpler though analogous dispositions are evident in a bee-hive tomb, recently excavated at Menidi in Attica, which has yielded a harvest in objects of colored glass and

* H. Schliemann, "Orchomenos"; Leipzig, 1881.

of ivory, strongly indicative of Oriental influences. Similar observations apply to a rock-hewn tomb at Sparta in Attica.

An important complement to our conception of the artistic style of heroic times was recently contributed by the self-sacrificing efforts of Schliemann in his excavations on the sites of Troy (1870-82), Mycenæ (1876-ff), and Tiryns (1881-ff), and which were crowned with brilliant success. The enthusiastic devotion, the unceasing perseverance, and the keen instinct of this most meritorious explorer have brought to light a world of objects of the artistic handicrafts

Fig. 107. Wall-Painting from Tiryns. (From Schliemann.)

which are well adapted to complete the picture of civilization in that mythical antiquity glorified in the epics of Homer. The substructures brought to light and the antiquities* discovered at Hissarlik indicate the existence of a prehistoric colonization which one may connect with the Homeric Ilium, or Troy, all the more unhesitatingly, as the license of the poet, who does not proceed like a sober historian or geographer, is taken into account. Upon the rock-foundations of the hill were laid bare gigantic walls built of great stone blocks, a double gate, a tower, and the remains of a palace-like structure.

* Cf. H. Schliemann, "Trojan Antiquities," and his "Atlas of Trojan Antiquities," particularly "Ilios," and his later work "Troja." A summary by C. Schuchhardt, "Schliemann's Ausgrabungen, etc," Leipzig, 1890, treats the matter fully.

Especially important are here two collateral buildings, in close proximity to one another, which were at first thought to be temples, their plan being indeed identical with that of the early Greek temples. There is now, however, no longer any doubt as to the larger edifice having contained the men's, the smaller one—somewhat farther back—the women's apartment, of the palace.

Of greater consequence are the structures brought to light by the excavations on the acropolis at Tiryns, because in them we are made

Fig. 108. Gold Mask from the Fourth Tomb at Mycenæ.

familiar, for the first time, with the ground plan of a ruler's residence in that remote antiquity (Fig. 105). The acropolis constitutes an elongated plateau about 980 by 328 feet, stretching from north to south. The most southern portion, the upper citadel, contained the palace, which was entirely surrounded by massive walls with galleries and chambers (A, B, C, D, E, P, Q, R). Upon the east side at △ a ramp leads up to the main entrance, so that the unprotected right side of the shield-bearing assailant was exposed to the missiles of the defenders.

Farther on, one entered the gate of the citadel and then reached

the propylæum (H), disposed on a grand scale and opening upon both sides into a pillared hall. We are now in the forecourt (F), where the stables and the storage-room for chariots were probably situated. A second propylæum (K), similar to but smaller than the first, leads into the main court (L), which was surrounded by hypostyle halls, and upon the front side of which at (I) is still to be found the altar dedicated to Zeus. Opposite this altar rises the impressive hall for the men, with an entrance hall and portico. In the center the round substructure of the hearth is still visible. Toward the west, amid a confusion of smaller rooms, is the square bath-room, the floor of which is formed by a single large slab of limestone. East of the men's apartment is that for the women (O), smaller than the former, and having only a vestibule without columns. In front of it is an inner court (N), partly encircled by porticos and connected at the southeast with a second court. Strictly isolated by a system of narrow corridors, but still connected with the propylæum by means of a passageway this establishment also is in thorough keeping with the still half-Oriental customs of the times. A comparison with Assyrian work reveals unmistakably a progress to greater freedom in the conception of the ground-plan. The rooms adjoining on the eastern side may have contained the conjugal sleeping-chamber (Thalamos) and the treasury (S).

Fig. 109. Golden Diadem from the Third Tomb at Mycenæ.

The foundation-walls were here of quarried stones, just as they were at Troy, while the upper ones were of brick and plastered on the inside. The door-sills made of limestone blocks are all intact and just as they were thousands of years ago, when crossed by the Homeric heroes. Likewise most of the round stone plinths upon which the columns rested are still in their original positions. On the other hand, the columns themselves and the antæ and the door-posts were evidently made of wood, as at Troy. The floors of the rooms and the courts were of plaster, intermixed with small stones. Their

Fig. 110. Gold Buttons from the First Tomb at Mycenæ.

ceilings were made of logs and planks covered outside with a layer of clay. No trace is to be found of any roof-tiles. One of the most important results of these excavations was the establishment of the fact that the plan of the later Greek temple was derived from the ground-plan of the men's apartment in the palaces of the Heroic Age. We may also surmise that the columns were modeled after the design exhibited on the Lion-gate at Mycenæ, which we shall have to acknowledge to be the prototype of the Doric capital.

Even more remarkable is the decoration, the "Kyanos frieze," found in the entrance-hall of the men's apartment. That mentioned by Homer (Odyss. vii. 86 *sqq.*) in his description of the palace of Alkinoos is explained by the frieze here, which corresponds most wonderfully with the words of the poet. It is an alabaster frieze (Fig.

106), with sumptuously designed double half-rosettes, hemmed by a spiral band, with vertical friezes of smaller rosettes between, disposed in the manner of triglyphs. The eyes of the rosettes and spirals, as well as the small rectangular buttons which are placed on either side of the rosettes, are filled in with blue glass (Kyanos). Besides this splendid specimen, remains of a very ancient wall decoration have come down to us, consisting mainly of linear combinations, among them a faithful imitation of the well-known ceiling of Orchomenos. But even at this early date figure painting finds its place, as is shown in the remarkable representation of an infuriated bull running at full speed, with a youth upon his back performing gymnastic feats (Fig. 107).

Fig. 111. Gold disk with Butterfly. (Mycenæ.)

As these discoveries are of great value in determining the true history of Greek architecture, so the objects of the minor arts, found in great numbers, especially at Troy and Mycenæ, afford important glimpses regarding the culture of that primitive period. In the first place, the great quantities of vases, stone and bronze implements, and gold ornaments unearthed at Hissarlik belong to that epoch which is generally designated as the Bronze Age. Among the vases those especially are noteworthy which are decorated with human faces around the spout, and which resemble those found in great numbers in Cyprus and elsewhere. The character of the decoration on all these objects is limited to such linear motives as circles, zigzags, crosses, and broad and narrow bands, which constitute the essential elements of ornamentation in all climes and countries.

Still more abundant was the harvest resulting from Schliemann's excavations at Mycenæ.* Irrespective of the more thorough disclosures falling to the share of the Lion-gate and the Treasury of Atreus, he astonished the world by the excavation of five large pit-tombs, imbedded in the rock-foundations of the acropolis of My-

*Cf. Dr. H. Schliemann, "Mycenæ"; "Report upon my Investigations and Discoveries at Mycenæ and Tiryns" (Leipzig, 1878), from which the accompanying illustrations are taken.

cenæ, in which he found no less than sixteen dead bodies, several gold masks, and a countless number of gold and silver ornaments, receptacles, and implements, bronze and copper vessels, and the like. At a later date a sixth grave was unearthed, without the walls of the acropolis. This verifies in a surprising manner the report of Pausanius, who states that within the walls were to be found the graves of Atreus as well as Agamemnon, and his companions slain with him. The part of the citadel where these graves were discovered is a circle of about one hundred feet in diameter, inclosed by rows of stone seats, which Schliemann, no doubt correctly, identified as the agora. First among the remains discovered there are numerous idols in terra-cotta, and many painted vases whose decorations exhibit those most ancient linear elements which are found in Cyprus and Troy, as well as in many other places. We find a mixture of straight-lined and circular motives, zig-zags, crosses, and rhomboid patterns occurring, besides circles, rosettes, stars, spirals, and kindred wave-lines. Intermingled with these are human figures, as yet, of course, exceedingly awkward in drawing and arrangement.*

Fig. 112. Gold disk with Cuttlefish. (Mycenæ.)

The most important finds, however, are the great quantities of beautiful metal-ware of infinite variety. Not only were bronze and copper vessels, weapons, and implements found, but above all many treasures of gold whose value by weight alone amounted to five thousand English sovereigns. The most remarkable of all, perhaps, are the five golden masks with which, it seems, the faces of the famous persons were covered, and which by no means display the general conventional type of face, but betray the attempt at individual portraiture (Fig. 108). Moreover, golden coats of mail, gorgeous diadems (Fig. 109), and over twelve hundred of the most multiform gold disks, which were no doubt woven into the clothing, adorned these bodies, entombed in princely splendor. A great number of large and small buttons, disks, or knobs, which in their variety

* Cf. regarding these various ornamental motives, Milchöfer, "Die Anfänge der Kunst in Griechenland"; Leipzic, 1883.

display the system of ornamentation prevailing here with the utmost clearness, must be particularly noticed. Fig. 110 shows a selection of these objects embossed with circles, spirals, rosettes, stars, and analogous combinations, partly also with zigzags. The incredible number of thin gold plates follow, in the main, a similar line of ornamentation, but there are also leaves and blossoms of flowers, particularly imitations of the morning-glory. The forms of the butterfly (Fig. 111) and cuttlefish (Fig. 112) also occur repeatedly. Throughout, then, we find predominant the earliest decorative principle, which in every primitive performance of humanity may be traced, like a common primeval language. Fig. 113 represents a golden wine-ewer ornamented in a similar manner. The majority of these works are embossed, but some pieces are cast, and many molds for casting have also been discovered. These reveal another principle of ornamentation which may be definitely traced back to the Orient. In the main we meet with animal forms, especially those fantastic, fabulous beings, like sphinxes, griffins, hippocamps; then, again, we find lions and leopards, as well as stags, swans, butterflies, cuttlefishes, and others. A few female figures with pigeons upon their heads and arms, evidently representing Astarte, must also be mentioned. All these forms show a typical mode of treatment suggestive of Assyrian art. There are also small models in gold of a temple to Astarte. Particularly beautiful is a large head of a cow in silver, with golden horns and a golden rosette upon its forehead, probably of Phœnician workmanship. Finally, there are several gems and gold rings, engraved with figure-scenes, especially of hunts and battles, treated in an uncommonly animated manner, presumably also of foreign origin, kindred to those ancient jewels the so-called "Island gems," indigenous, perhaps, to Crete. Adding to this the 15 large silver vessels, 22 heavy golden vases, goblets, cups, and cans, gems of rock-crystal, onyx, agate, articles of ivory and alabaster, necklaces

Fig. 113. Golden Wine-Ewer. (Mycenæ.)

of amber, 150 bronze swords, 32 bronze vessels, 28 golden diadems, 3 breastplates, and a belt of the same metal, many finger-rings, bracelets, earrings, necklaces—all of gold—which were found here, we can appreciate the profusion of this most important discovery. The great quantity of gold ornaments, as well as the style of the decoration, betrays the agency of that Oriental taste for art which marks the early epoch of Greek culture and has been reëchoed in the descriptions of Homer. In other places, similar works have been found; as, for example, in a bee-hive grave at Vafio, near Amyclæ, where objects in Mycenæan style, notably two golden goblets embossed with figures of bulls, were unearthed.

At what period this peculiar mode of art was developed in Greece can scarcely be accurately determined. By means of Egyptian monuments it has recently been proved, however, that the prime of Mycenæan culture comprised the epoch from the fifteenth to the twelfth century before Christ. Presumably its higher development was coeval with the last half of the second millenium. With tolerable certainty, the end of this earlier period of civilization may be dated about the year 1000. At this time that remarkable revolution occurred which completely overturned all the relations of Greece, and laid the foundation of that spiritual life, that literature and philosophy, and that pure and beautiful art which henceforth we designate as the Greek. The impetus to this revolution was given by the powerful race of the Dorians, who broke over Hellas from the northern mountains, conquered the Peloponnesus, and founded a Doric confederation there. The Ionians, likewise, are distinguished among the Greek races for a high degree of culture; and it is the contrast between these two races, so radically diverse, though dwelling on a common national soil, that gives to Greek life its wonderful depth, its richness, and its perfection of form. In opposition to the reserved, self-dependent Dorians, fond of war, and tenaciously adhering to tradition in laws and customs, we find the versatile Ionians, a people of many gifts, endowed with a marked susceptibility to impressions of every kind. In eager emulation these two races developed their peculiar natures, extended their influence and power, and, by means of their numerous colonies, spread Greek culture over Asia Minor and the islands, over Southern Italy (Græcia Magna) and Sicily. Even on the distant shores of Southern France a Greek colony arose at the beginning of this epoch in Massilia (the Marseilles of the present day). It is in this very difference, in this double nature of Greek life, that the contrast to the East consists; and still more strong does this contrast appear when, in the course of the development of the Greeks, we perceive the long inexhaustible depth and power of their progres

sive civilization. It is obvious that all this was only possible on the soil of a free State; and in this respect it was the republican constitutions of Greece, differently organized as they were in the different races, tending either to fixed aristocratic permanence, as in the Dorians, or to decided democratic progress, as in the Ionic Athenians—it was these free constitutions which formed a basis for the high mental development of the Hellenes, and which, in the golden time of their prosperity, came forth victorious as the higher principle from the struggle with Asiatic despotism.

2. *Greek Architecture.*

A.—THE SYSTEM.*

While among the nations of the East, ruled as they were by despots, the art of architecture was chiefly displayed in the palaces of the kings; while even in Pelasgic times, among the ancestors of the Greeks, so far, at least, as we can gather from Homer's descriptions and from the existing remains, it found its principal employment in erecting the royal castles; with the founding of the Greek republics such purely personal service was no longer called for, and the highest ideas alone, the interests of the whole body politic, were considered as having a right to artistic embodiment. Hence, in the *temple* alone the art of architecture found a field for its development; and other public buildings, serving the general good, borrowed their artistic character from the temple structure. In the palmy days of Greece no care was bestowed upon the design and decoration of private dwellings.

The temple rose upon a substructure of several steps in a sacred court, which was surrounded by high walls. It was strongly inclosed and distinctly organized as a plastic work. While the Oriental nations sought to give expression to their vague yearnings after the sublime in the massive character and bewildering size of their buildings, the Greeks attained the impression of dignity and solemn elevation by moderate extent, simple purity, and harmonious proportion of the parts. While in the one we are constantly reminded of the expression of dumb, slavish masses, doing the work of the few men of thought and feeling; of lifeless formulas of design and of a religion tending to asceticism; in the other, we find the lofty grace of an un-

* See: C. Bötticher, "Die Tekontik der Hellenen"; 2 vols, Potsdam, 1844. Viollet-le-Duc, "Entretiens sur l'Architecture"; vol. i. Durm, Dr. J., "Die Baukunst der Griechen" in "Handbuch der Architektur"; Darmstadt, 1880. Semper, G., "Styl: oder praktische Aesthetik"; Munich, 1879.

fettered mind, the conscious feeling of human dignity, and the cheerful sense of a worship of clear daylight divinities, all expressed in the entire form of their glorious marble temples. The ground-plan (Fig. 114) is, with few variations, always the same,—a simple, plain, and well arranged design. The building is a rectangle, about twice as long as it is wide, and at the eastern end has a porch of entrance, very commonly a deep vestibule with two columns set between square antæ, or pilaster-like terminations of the side walls. A somewhat more elaborate plan provides a similar porch at the western end; and then the näos or inclosed chamber is commonly divided by a partition. Small temples were uniformly of this character. The next step in elaboration was to put up an outer portico, commonly of four columns, at one end or at each end. The form has a still further enrich-

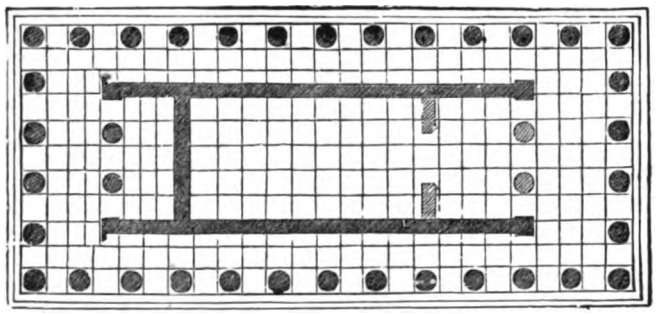


Fig. 114. Ground-Plan of the Temple of Theseus at Athens.

ment by a colonnade all round, and over this the marble gabled end rests on a simply constructed and richly ornamented entablature.

Two different species of temple may be pointed out, which, while in general retaining this primitive form, varied according to the purpose for which they were designed. The true temples for worship inclosed the sacred image of the god, and were only regarded as his place of abode. In front of the entrance was the altar of burnt-offering, on which sacrifices were offered to the god in the presence of the assembled people, the doors of the temple remaining open; while only those who desired to place offerings on the small altar within, or who brought votive gifts to the temple, could enter the temple itself. Before this could be done, however, it was necessary to be sprinkled with holy water from the vessel in the forecourt. The other species of temple was the agonal (αγων, an assembly met to see games), which contained a splendid image of the god, and within which, probably, took place the coronation of the victor in the public games which

were consecrated to the god of that particular temple. As a moderate space sufficed for either of these purposes, moderate dimensions were established for the ground-plan. This plan consisted of a vestibule (pronäos), a cella (näos), with a second chamber or vestibule in the rear (posticum), to which, occasionally, the opisthodome was added for special use. When, however, a more spacious building was necessary, two rows of columns were placed in the interior, supporting an upper gallery with another row of columns, above (Fig. 115). A central space was sometimes left without a roof, in order to supply the

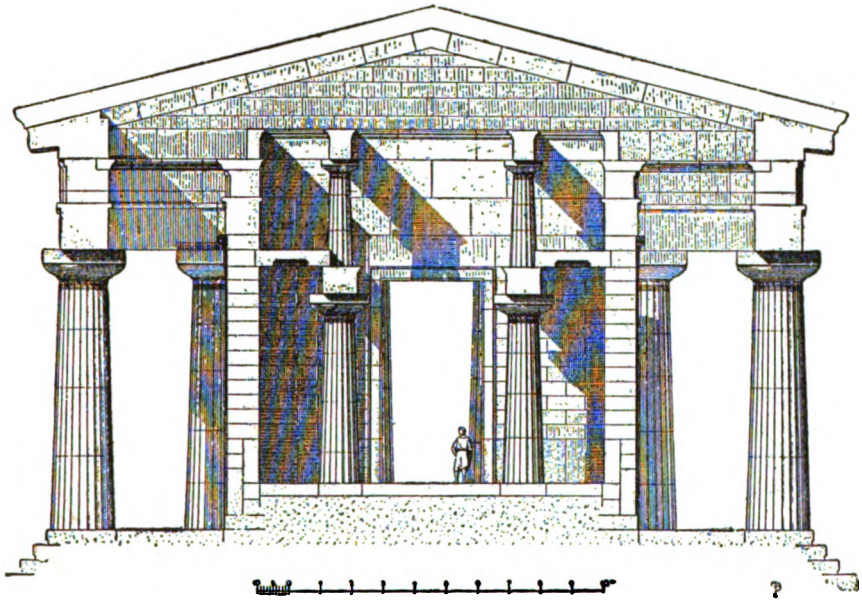


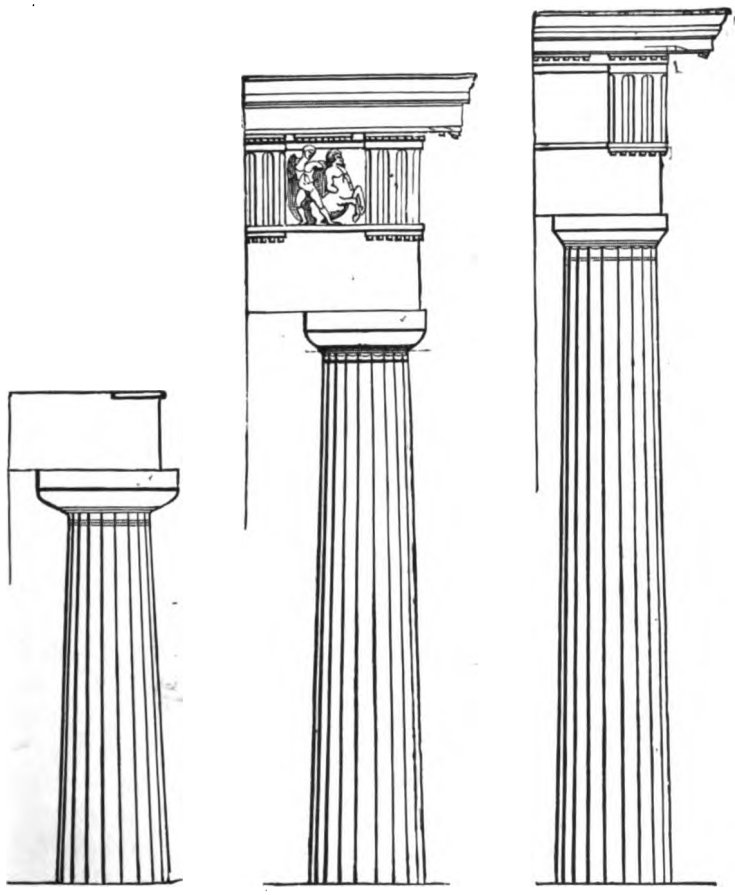
Fig. 115. Section of the Great Temple at Pæstum.

temple with light; so that this portion of the building was open to the sky. Such temples were called hypæthral temples. It is not known, however, how the hypæthral opening was managed. The whole theory of the common use of such an appliance rests upon a passage in Vitruvius which is hardly understood. It is far more probable that in the great majority of temples the nave received no daylight except through the doorway.

The temples are described according to the character of the external colonnade. A temple surrounded on all four sides by pillars is called peripteral; one having a portico only at the front is called prostyle; one with a portico both at the front and the back is called amphiprostyle; and one, the portico of which is formed with pillars

between the projecting side walls (antæ) of the building, is said to have a portico *in antis*. If there were two complete colonnades surrounding the whole building, it was called dipteral; if the inner of the two rows is omitted so that the outer row stands at double the usual distance from the side walls of the cella, we have what is called pseudo-dipteral (false dipteral); if, instead of a colonnade of independent pillars, there are only half-columns against the side-walls of the cella, the building is called pseudo-peripteral. The colonnade which, to a greater or less extent, surrounded the building, served several purposes; it acted as a support to the roof of the portico, it gave room, and it afforded access. The shaft with its numerous channels or flutes springing erect, with an elastic swelling of its profile diminishing toward the top, expressed in the most lively manner, no mere passive endurance, but an energetic, active support. The capital, or head of the column, showed vividly the conflict between support and burden. So at least it may appear to moderns, who may ascribe to the artist a meaning of which he may not have been conscious. The Greek spirit may be thought to have concerned itself rather with extreme subtilty of form and proportion—even the swelling form (entasis) of the shaft being so slight and so refined that the eye hardly detects it. Above the capitals the blocks of the architrave (epistyle), stretching from the center of one column to that of the next, united them with its broad band, on which rested the frieze with its sculptured designs. Above the frieze, again, projected the main cornice, which on the inside supported the beams of the roof. At the ends of the oblong building, and bordered by a molded member, the profile of which repeated those of the cornice and roof-gutter, there rose the pediment, which was often adorned by means of groups of statues filling the triangular space; and, lastly, on the front upper edge of the pediment there stood small pedestals supporting sculptured figures, or an ornament of conventional design, a modification of the familiar anthemion, often called palmette or honeysuckle ornament. These ornamental erections upon the sloping top of the pediment are called acroteria. Along the cornice on the sides of the building, and on the outer side of the gutter, lions' heads, placed at intervals, served as gargoyles or spouts, and ejected the rain-water from their mouths. The cornice was crowned with the tiles, which, set upright, closed the ends of the ridges in the roof tiling; and these tiles, shaped like the honeysuckle ornament, tended to become a conventional ornament apart from their original destination. In all the noblest works of a later time the covering of the roof, like the rest of the building, was executed in stone or marble, and a graceful ornament ran along its ridge.

What distinguishes this Greek stone construction from that of all the other peoples we have been considering is the careful disposition of the different members, of the roof, and of the pediment. But Greek architecture did not rest satisfied with this superiority in construction alone. There were devised a series of art-forms which



Temple at Corinth. Parthenon at Athens. Temple at Delos.

Fig. 116. Doric Order.

fully, and with the utmost precision, indicated the nature and constructive value of the several parts; and in these essential character and form so thoroughly complement each other as to produce a perfect artistic organism. The construction was, indeed, of the utmost simplicity; but it became the foundation of a wholly satisfying and complete architecture, which remained unchanged in essence through four centuries. So rich, however, was the genius of this incompara-

ble people, that in their architectural forms there appear two conceptions thoroughly independent of each other, though resting on a common basis, which, known as the Doric and Ionic styles, correspond most closely with the character of these two principal races. As, however, in Attica the Ionic and Doric elements of civilization were harmoniously intermingled, in like manner Ionic architecture acquires a special modification in the Attic form of the style; and, lastly, the Corinthian style appears as an after-fruit of graceful luxuriance developed from the Ionic style of which it is a modification.

Passing on to the examination of this rich artistic life, we must begin with the *Doric style* (Fig. 116).

Perfect coherence and simple, clear logicalness characterize the Doric building in its construction and form.* The Dorians give no foot to each separate column; the upper plinth forming the edge of the stereobate, or platform, which as the top of the substructure serves as a common base for the whole colonnade. Short and strong, the shaft usually reaches only a height of about five and a half times the diameter of its base; but it has an apparent slenderness and relative height given it by the channels, which, sixteen or twenty in number, are shallow and divided from one another by sharp edges. The interval between the pillars is, on an average one and a half times the diameter. These proportions vary, however, as is shown in Fig. 116, where the normal measure may be seen in the central illustration (Parthenon); while the archaic temple fragment at Corinth is only four, that at Delos, dating from the later period, as much as six diameters in height. A series of small, narrow grooves separate the shaft from the capital, these being partly incised in the bell of the capital itself, partly in the shaft, allowing the lower member of the capital, the so-called echinus, to rise with a first strongly projecting, and then receding, outline. The echinus carries a square plinth (abacus), which affords a sufficient base for the architrave, and completes the transition from the round, vertical, supporting form to the rectangular, horizontal, and reposing parts. The architrave then follows, resting upon the abaci; its face, in the earliest example, being on a line with the shafts at their highest point. The horizontal position of the architrave changed in the course of time. It was composed of separate blocks of large size, terminated above by a rectangular molding cut in the solid, and having the apearance of a thin, projecting slab. On the underside of the latter, over the center of each column, and over the center of the space between them, a small rectangular molding, like a short block, is cut; and from the under side of each of these, six

* Cf. P. F. Krell, "Geschichte des Dorischen Styls" (with an Atlas of twenty-four plates); Stuttgart, 1870.

little peg-like ornaments (guttæ) seem to hang. These are intended to designate the places at which short, rectangular blocks rise above the architrave to support the cornice; these blocks have two complete flutings on the flat surface, and two half-flutings at the angles, and are called triglyphs — that is, three-cut or three-grooved. The spaces between the triglyphs are called metopes; they were originally open, but were subsequently always filled with stone slabs, which were generally ornamented with reliefs. The name metope was then transferred from the open space to the solid block. These metopes and triglyphs form the frieze.

This fixed division of the frieze, and the strict relation of its different parts to the position of the pillars, gave to Doric architecture its coherence in plan and construction. We at once perceive from the design that it was originally calculated for the simple primitive form of the temple, with its pillared front; for wherever peripteral buildings were erected, a difficulty must have arisen with the corner pillar, if the triglyph, according to rule, were to be placed on the center of each pillar. Hence in this case it was moved close up to the angle (Fig. 116); and the inequality was made to appear less than it really was by the system of diminishing the distance between the columns at the angles and those next them on either side. The main purpose of this close setting of the columns near the corner was evidently to give greater appearance of solidity at the point where the columns would be seen against the sky and not backed up by the naos wall. Above the frieze was the cornice, the highest member of the entablature. This projected considerably; and from its under surface small blocks, the so-called mutules, appeared to hang as if freely suspended. These were placed in rhythmical relation to the metopes and triglyphs, each of these members having a mutule over it (Fig. 116). On the lower surface of each mutule were carved certain ornaments similar in form to the guttæ on the abacus-like molding that crowned the architrave. These drops were arranged in three rows, six in each row. In each of the two narrow fronts, from the extremities of the true, the horizontal, cornice, a second cornice, identical with it in all respects, except that it wanted the mutules and their drops, rose obliquely, and inclosed the triangular tympanum or flat surface of the pediment (Figs. 124, 127). This triangular space was filled with slabs of stone, in early work sometimes painted on the flat or carved in relief, but in the richer work of later times forming a background for the sculptured groups, from which it received a decoration corresponding with the intention of the building. Along the sides of the building, upon the cornice, was placed the gutter, made

either of marble or terra-cotta, and having for its profile that graceful curve to which the name of cyma, or wave, was given. To these features we must add the antæ, that is to say, the ends of the side-walls on either side the entrance to the cella, which, from being furnished with capitals, seemed to be related to the true columns, while from their rectilinear form and narrow architrave with its painted band of ornament (Fig. 117) they might be reckoned a part of the surrounding wall. We have now enumerated the essential elements of the Doric building. We have still to mention, however, the very curious devices used to increase the delicacy of the architectural effect. The Greek builders avoided absolutely straight lines except in minor details. The long line of the stylobate was cambered or curved upward convexly toward the middle; the curve being quite easily distinguished by one who looks along the stylobate, while not perceptible to a person standing nearly opposite. These curves were repeated in the entablature. The shafts of the columns, besides having the curved entasis, were set out of plumb; so that the corner columns of a peristyle had a decided inward slope from bottom to top. The purpose of these and similar departures from strict formality was evidently a result of greater charm than in a building of strictly vertical and horizontal right lines.

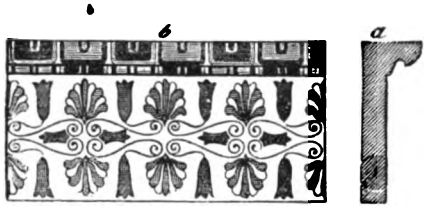


Fig. 117. Ornament on the Capitals of the Antæ-Pilasters of the Theseum, Athens.

As to the material of the Doric temple, it is of soft stone in Sicily (Girgenti, Selimonte), and in South Italy (Pæstum or Pesto). The surface of these columns, antæ, architraves, etc., was then covered with a thin coating of stucco which was afterwards painted. When in Greece proper, and especially in Athens, hard white marble was used for the structure, the painting was still retained. It was in strong, bright colors, and covered a large part of the exterior of every Doric temple; the bells and abaci of the capitals and other prominent parts receiving elaborate patterns* (Fig. 118). The sculpture was also elaborately painted, and great pains were taken to relieve it upon a background of contrasted color. In the famous frieze of the Parthenon some details were left entirely to the paint-

*J. W. Mauch, "Die Achitektonischen Ordnungen der Griechen und Römer." Charles Chipiez, "Histoire Critique des Origines et de la Formation des Ordres Grecques. Hittorff, "Le Temple d'Empedocle," etc. "Baukunst der Griechen," in *Handbuch der Architektur*, Pt. ii., vol. i. (by Dr. Josef Durm); second edition, 1892; Pennethorne, "The Geometry and Optics of Ancient Architecture."

brush. It appears probable that the unpainted surfaces were stained yellow or buff, perhaps with the use of wax melted by the application of heat on the spot (encaustic).

The Ionic style is essentially different from the Doric both in its main forms and details. Its softer and more womanly forms contrast with the strong, manly, and even austere forms of the Doric. That severe logic by which the principles of construction had become, as it were, hardened in the Doric system, gave way here to a freer and more animated treatment. The separate members enjoy a greater independence, which is made manifest by an abundance of significant details; and, instead of the severe Doric simplicity, we have the sweet but capricious play of the most graceful forms. Even in the column we readily perceive the essential point of difference between the Ionic and the Doric styles. The independence of the column is indicated by the fact that it stands upon a base of its own (Fig. 119). The base consists of circular members, moldings, arranged horizontally around the generally cylindrical block which forms it. The profile of these members shows two narrow flutings connected with each other, as well as with the plinth and the upper part, by finely reeded moldings. The upper part consists of a strongly projecting molding, from which the shaft rises with a slight contraction. The shaft is far more slender than that of the Doric order, being from eight and a half to nine and a half times its greatest diameter; and, in harmony with this, the interval between the columns is increased to two diameters, giving to the whole an appearance of greater lightness and slenderness. The number of the flutings amounts to twenty-four. They are separated from each other by a narrow fillet, a portion of the periphery of the column; not by a sharp edge, as in the Doric. At the same time they are hollowed deeper, and are more nearly round; they also terminate both above and below in a circular form.

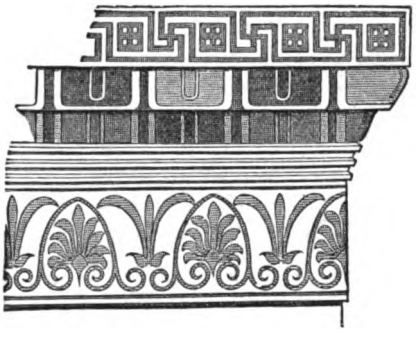


Fig. 118. Painted Capital of Doric Anta.

The most original part of the whole is the form of the capital. It is true, that, like the Doric, it has an echinus, only rounder in profile, and less projecting, characterized by the so-called egg-and-tongue ornament, and united to the shaft by a narrow band carved in beads.

But over the echinus, instead of the simple abacus, a member, somewhat resembling a cushion, is placed, projecting on both sides, and ending on each side with a strongly marked volute. The ribbed edges of these volutes curl round the hollowed surfaces of their flutings, and end in the center with an eye which is often ornamented with a rosette; while, on each side, the angle between the volute and the cushion is filled up with a graceful ornament, which we may imagine was formed from the flower of the honeysuckle. This description of the capital, however, applies only to the front and back; on the other two sides we see only the ends of the cushion-like member, which is wound around in the center by a band, and allows the echinus, with its string of beads, to be seen below it. The capital is terminated above by a thin, square plinth, the edge of which has a curved profile, and is ornamented with a pattern of leaves. Any description of this capital, graceful and beautiful as it is original, must fail to do it justice; and it is especially in dealing with a design so remarkable as this that we discover how difficult it is, by mere reason alone, to hope to apprehend the creations of Greek art. As we frequently meet with the volute, the chief feature of the Ionic capital, in the art of Asia Minor, where it occurs in a comparatively awkward form at a very early date, we shall not, perhaps, appear too venturesome if we find in it a motive common to the whole art of that country, but which, however, was brought to perfection only by the Attic Greeks, and received from them alone a worthy and appropriate application. It certainly cannot have been accidental that the Ionic Greek architecture should have

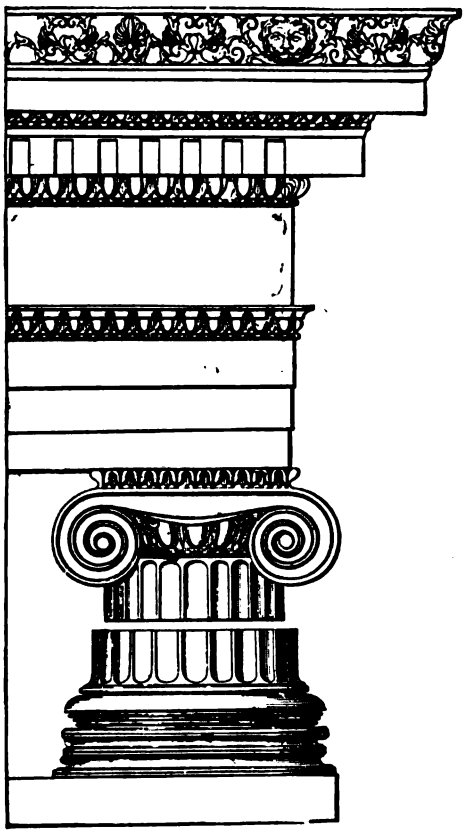


Fig. 119. Ionic Order. From the Temple Pallas Athene, at Priene (Caria).

found its complete development in the continent of Asia Minor; but in the lines of the capital, curving downward, a passive yielding to the weight of the entablature is expressed, which distinguishes it in a marked manner from the strong Doric style.

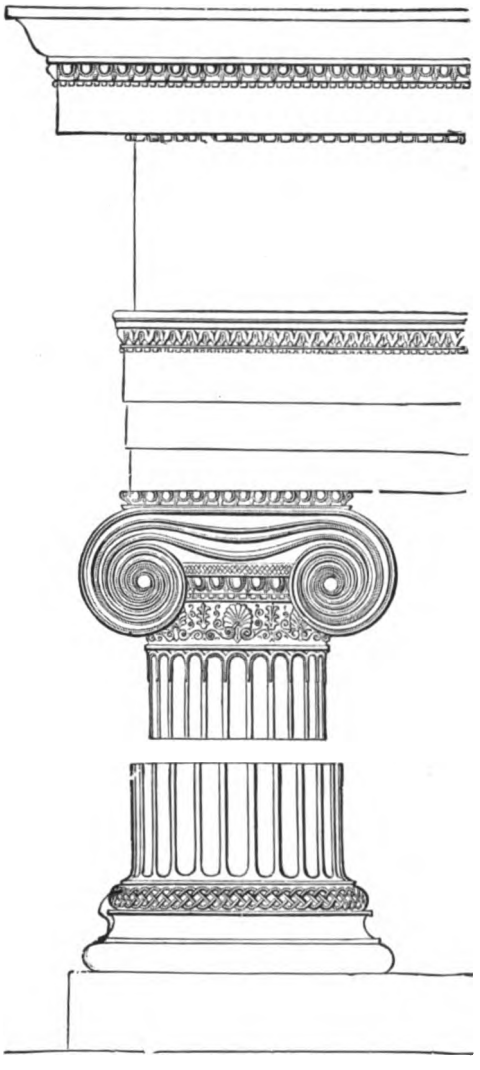


Fig. 120. Attic-Ionic Style. (From the Erectheum at Athens.)

An equal richness and variety meet us in the forms of all the other members. Thus the architrave exhibits nothing of the heavy, undivided massiveness of the Doric; but, although consisting in its whole height of one single stone, it is so cut (Figs. 119 and 120) as, when aided by the effect of shadow, to appear to be composed of three (or sometimes of two) layers, projecting one over the other. It is terminated at the top by a molding ornamented with beads and foliage, which crowning member is added to indicate the complete independence of this part likewise. Still greater difference is seen in the frieze; for instead of the marked division by means of the triglyphs and metopes, we find a broad band of blocks of stone often filled with represenations in relief of men and animals, to judge by its name of zoöphorus (*life* or *figure bearer*). Above it, the plinth of the cornice, as in the Doric order, projects, casting a strong shadow; but the Doric mutules are here changed into a series of cube-like blocks, the so-called dentils, placed at short intervals apart, having somewhat the same appearance of

free suspension as the mutules. The pediment and the roof are, in the main, like the Doric, only the gutter has a waving sectional outline—that curve which is technically termed the *ogee* (Fig. 119).

Having drawn attention to that difficulty in treating the angle-triglyph of the frieze which makes itself felt as a weak point in the Doric system, we ought just as little to conceal the weak point in the Ionic order. This appears in the form of the capital; it is not fitted for every position, like the Doric capital, which is alike on all sides; but it is suited only for the simple portico of one row of columns. In a peripteral design—the colonnade surrounding the cella on all four sides—the capital of the corner pillar must, according to rule, turn its face to the front; and therefore a side-view would present an insufferable dissonance with the capitals of the side, which would fall out sidewise from the heart of the building. This was remedied, as far as possible, by the expedient of giving to the capital of the angle-column two faces on two adjoining sides; so that the volutes of these two faces meet at the angle in a strong, projecting curve, not, perhaps, symmetrical with the other angles. From such ingenious expedients we may consider it established, as regards both the Ionic and the Doric styles, that the peripteral form was not adopted until a more recent period.

In Attica, in consequence of the prevailing Doric influence, the Ionic style underwent a modification which has been appropriately named Attic (Fig. 120). In the first place, the base of the column is deprived of its particular plinth; to compensate for this, however, the base is changed radically, and is made very massive in its parts. Thus we may describe the Attic base as formed of a sharply contracted fluting between two ovolos; yet in this limited space the principle of tapering shown in the shaft was expressed, as it were, on a small scale; for the lower ovolo projected farther, and was more strongly formed, than the upper one. The column was, in the main, the same as in the pure Ionic style, only it was less slender in its proportions. The capital also expresses a more energetic life by the greater projection of its powerfully formed volutes; and it has commonly the broad band adorned with anthemions (see Fig. 120). The entablature has the same main forms in the Attic buildings as in the Ionian, only the frieze appears considerably higher, and the cornice is without the dentil ornament, instead which the projecting plinth is strongly undercut along its whole length, so that the edge in front overhangs the crowning member of the frieze (Fig. 120).

In general, both the Attic and the Ionian buildings display their more lively variety in an abundance of terminating and crowning

members, projecting in profiles of various curves, and richly decorated with sculptured leaf-ornament. That in some Attic examples this ornamentation is found to be painted, instead of carved, only proves a greater inclination to the Doric simplicity. The decorative fancy of the Ionic style is especially graceful as displayed on the antæ and walls, which have generally a capital consisting of a plinth crowned by graceful moldings, and below this display a broad border consisting of flowers and foliage. Both in Ionic and Attic works, as the employment of sculptured decoration increased, colored ornament seems to have declined.

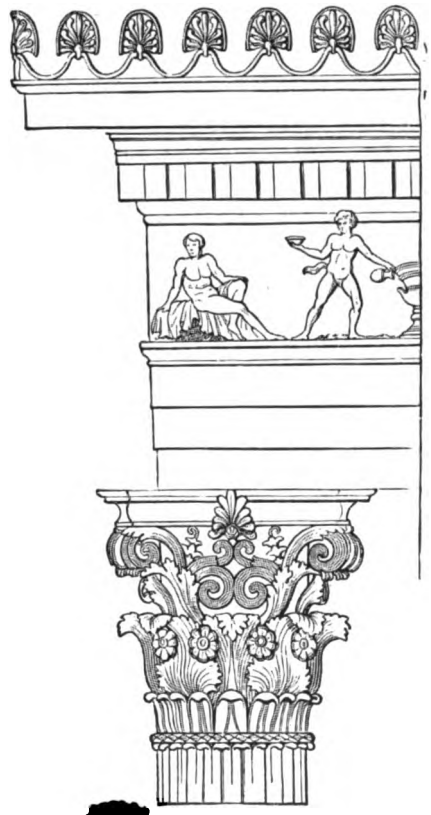


Fig. 121. [redacted] and Entablature from the [redacted]gic Monument of Lysicrates at Athens.

Lastly, we have to mention the Corinthian order, which, however, cannot be regarded as an independent style, like the Doric and Ionic, but is only considered as a modification of the Ionic, introduced at a later period. While the main features of the building, as a whole, were borrowed from the Ionic style, a new and original form was devised for the capital; and it seems a significant fact, that the sculptor Callimachus was said to have invented it, since we may infer from this attribution that the capital was regarded as having been created by artistic reflection that did not shrink from freer and more novel combinations. Very few Grecian buildings are known to us in which the Corinthian capital was used. The most important is the round building (the Tholos) at Epidauros; but the one best known is the little choragic monument named below. The general characteristic of this capital is the slender, cup-like form of the whole. It is decorated with several rows of leaves, placed upright, and curved outwardly, with the points slightly curled over. The elegant, richly

articulated, and finely dentated leaf of the acanthus is generally employed; yet more simple reed-like leaves are also used.

The further development of this form soon led, however, to a richer composition. The lower part of the capital is formed also here by two rows of eight acanthus-leaves, rising one above the other. From these, on each of the four sides of the capital, rise two double but unequal branches. The inner, smaller ones curl together toward the center, where they meet in spiral whorls, and support a palm-like flower; the outer and stronger branches, on the contrary, rise toward the upper angle, supporting the plinth of the abacus, the sides of which are not straight, but retreat in a strong curve, with sharply projecting angles upon their curved ends (see Fig. 121). By these corner volutes, the transition from the round to the square form is effected in a manner as spirited as it is sculpturesque; and the capital, by this making all four sides of it alike, regains those more general advantages which distinguish the Doric, but which are wanting in the Ionic column. The greater richness of the design, the more realistic ornamentation resulting from the adoption of vegetable forms, united to its greater applicability to all the purposes of architecture, gave this style extraordinary popularity at a later period.

B.—EPOCHS AND PRINCIPAL BUILDINGS.

The history of the gradual development of the architectural system of the Greeks from insignificant beginnings to the perfect form in which we find it, must forever remain obscure. What stages must have been passed over before the pure and beautiful form of the Hellenic temple took the place of the primitive buildings of Pelasgian antiquity may be guessed, but can never be certainly known. We learn from an expression in Pausanias, that, as early as 650 B.C., the two Greek styles, the Doric and Ionic, were practiced side by side, and were held in equal estimation; but Pausanias is a late writer. Both in design and construction, even the oldest of the works still existing display a consistent maturity of system; and it is only when the whole series of these monuments is considered that we perceive in the more delicate design of the separate members certain gradations, which may be taken as marks of the various stages of development.

The First Epoch

may be considered as extending from about the time of Solon to the Persian wars. Greece was still in all the vigor of early youth. The single states had developed themselves in strict independence, and re-

joiced in that active development of their material and intellectual life which was especially displayed at Athens, under the rule of the Pisistratidæ, by splendid artistic undertakings, by the cultivation of poetry, and by the care that was expended in collecting the works of Homer. The architectural remains of this period, though not considerable in number, are severe, archaic, and even clumsy. This was especially the case in the Doric works of Sicily and Lower Italy,

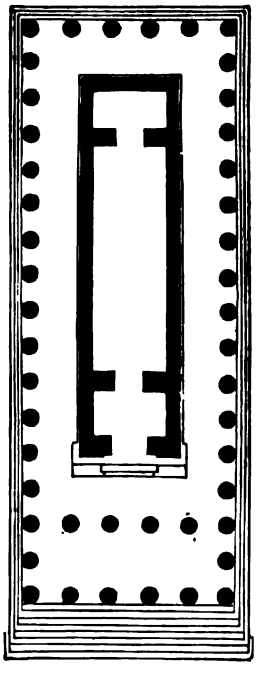


Fig. 122. Central Temple on Acropolis at Selinante.

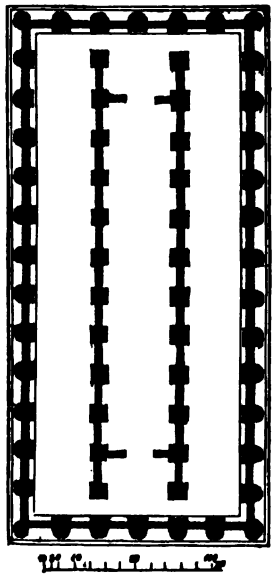


Fig. 123. Temple of Jupiter at Agrigentum.

where this ruder treatment prevailed for about half a century, owing to local circumstances and to the less delicate material employed. In Sicily itself there are extensive remains of more than twenty temples in the Doric style, many of them indicating works of colossal design.* The form of these temples is, almost without exception, the peripteral, and this with a wider, almost pseudo-dipteral, placing of the colonnade. The cella is long and narrow, and the pronaos is always of considerable size. The details of the building are heavy and rude in their proportions; the pillars appear short, swelling much, and

*Cf. Duca di Serradifalco, Le Antichità della Sicilia. Hittorf et Zanth, Architecture antique de la Sicile. Kolderey and Puchstein, Die Griechischen Tempel in Unteritalien und Sicilien.

also decidedly tapering; the entablatures are massive and weighty; the capitals have an unusual projection;* and the profile of the echinus is a strong and prominent curve. The material is a coarse-grained limestone, with a delicate stucco covering over it; and there are many traces of polychromatic decoration.

At Selinus (Selinunte) there are the remains of six peripteral temples in two groups of three; one group being in the town, the other on the acropolis. Of those in the former group, the most northerly, called the Temple of Jupiter, is distinguished by its mighty proportions, being 161 feet broad by 367 feet long, with a peripteral colonnade having eight pillars at each end, and seventeen on each side.† The central temple (Fig. 122) on the acropolis, though less in dimension—being 75 feet broad by 205 feet long, with six pillars by seventeen, therefore of considerable length—is rendered especially important by the extremely ancient reliefs on its metopes. The so-called Temple of Jupiter at Agrigentum (Fig. 123) presents an unusual ground-plan. Like its rival at Selinus, it is of considerable extent—164 feet broad by 345 feet long; but it is surrounded, as a pseudo-periptery, only with half-pillars, which are attached to the cella-wall; or rather, the cella-wall is advanced to the line of the outer columns making what is almost unknown to us in Greek art, a huge hall within. The columns are shams, built up with the wall like buttresses, even the Doric capital divided vertically by a joint between two stones. It is therefore wholly out of harmony with the logic of Greek work; besides which it deviates remarkably from the ordinary rule by unequal arrangement of seven half-pillars in front to four-

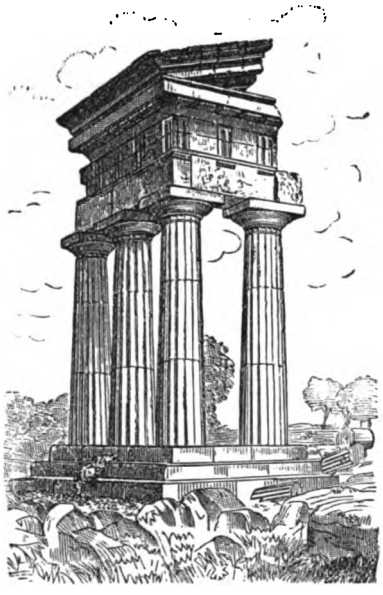


Fig. 124. Remains of Temple (of Castor and Pollux?) at Agrigentum.

* See Viollet-le-Duc, "Entretiens," etc., vol. i., p. 47; and also in his "Dictionnaire de l'Architecture," vol. ii., p. 482, art. "Chapiteau."

† In counting the columns, those at the angles are considered as belonging to the side that is being reckoned. Thus in Fig. 125 the Temple of Poseidon has fourteen columns on each side, and six at each end, and yet has only thirty-six in all.

Two of the temples at Paestum or Poseidonia, in Southern Italy, on the western coast. The buildings are those called Temple of Poseidon (Neptune) and "The Basilica," which latter name was given to the ruins because no wall of an enclosed cella (naos or sekos) had been discovered, whence it was assumed that the whole space was open as a sheltered promenade. This building is unique in Doric columnar architecture, as having nine colums on the front instead of an even number. These Doric temples are generally of archaic or of perfected early style, 480-440 B.C

PÆSTUM

RUINS OF THE TEMPLE OF NEPTUNE (RIGHT), AND THE SO-CALLED BASILICA

teen on the long side. Instead of detached columns, Atlantides of colossal proportion and archaic rigidity support the roof in the interior. Besides these, there are preserved considerable remains of several other temples, which follow the peripteral arrangement with a somewhat corresponding treatment. Of one of these, the so-called Temple of Castor and Pollux, the remaining angle of which is distinguished for its noble proportions, a view is given in Fig. 124. At Segesta (Ægesta), also, there is still standing the colonnade and gable of a stately peripteral temple, never wholly completed. The columns remained unfluted, and were destined to outlast, in their unfinished state, the destruction of the naos and the roof. Toward the end of the fifth century, Greek civilization in Sicily suffered from the inroads of the conquering Carthaginians; and we know for certain that the two colossal temples of Jupiter at Selinus and Agrigentum were not wholly completed at the period of the taking of the cities by

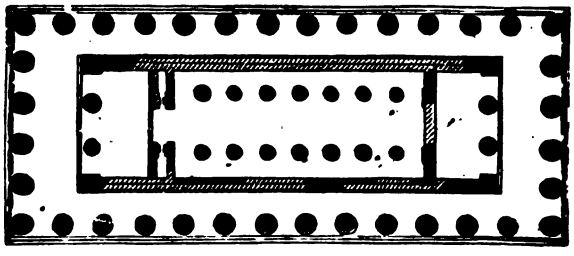


Fig. 125. Ground-Plan of the Temple of Poseidon at Pæstum.

the Punic armies—the one in the year 409 B.C., and the other 450 B.C.

Related to the Sicilian monuments, we find the Temple of Poseidon at Pæstum, in Lower Italy, one of the best preserved and finest remains of antiquity* (Fig. 125). Moderate in dimensions, being 81 feet broad by 193 feet long, the building rises in solemn majesty on the site of the formerly flourishing Greek city of Poseidonia (the city of Poseidon). Probably belonging to the same period as the above-named Sicilian temples, it has an unusually clear and normal ground-plan, a peripteral colonnade of six columns by fourteen, and a long cella with pronaos and posticum. That which, however, makes this temple of the utmost importance for the understanding of the ancient Hellenic architecture, is the happy circumstance of the complete preservation of the whole interior colonnade, which supported the roof, and marked the hypæthral plan. Two

* Cf. Delagardette, "Les Ruines de Pæstum"; Folio, Paris, 1799. Koldewey (see above).

rows of seven columns divide the cella into a broad central nave and two narrow side-aisles. The former was without a roof, on the hypæthral plan; and the upper columns of the galleries, which were to support the outer wings of the roof, are still to be seen (see Fig. 126). The two flights of steps also, by which the gallery was reached, are still existing.

The remains in Greece itself are of less importance; although here also there was no lack of important architectural undertakings at that time. Thus, in the time of the Pisistratidæ, the shrine of Apollo at Delphi was splendidly restored, after the earlier temple had been de-

Fig. 126. View of the Interior of the Temple of Poseidon at Pæstum.

stroyed by fire; and, under Pisistratus himself, the Temple of Jupiter at Athens was restored, though its completion was not effected till the time of the Roman emperors. This temple was dipteral in structure, and of considerable dimensions, being 171 feet broad by 354 feet long. At the same period, the earlier Parthenon on the Acropolis at Athens was also erected, the subsequent destruction of which by the Persians led to its brilliant restoration under Pericles. The only temple remains of this period preserved on Greek soil are those at Corinth, consisting of seven Doric pillars of heavy proportions, probably the ruins of a shrine of Pallas; the building was executed in limestone, with an excellent stucco coating over it.

One of the oldest Greek monuments, the Temple of Hera at Olym-

pia, discovered during the German excavations, is remarkable for its elongated ground-plan, six columns at each end to sixteen on each side, or forty in all (see above, page 152, note), and for the striking variety of details, especially of the capitals. This feature has been explained by the fact that the columns, made originally of wood, were gradually replaced by stone pillars as they progressively decayed. That the architrave was also of wood, while the upper parts of the

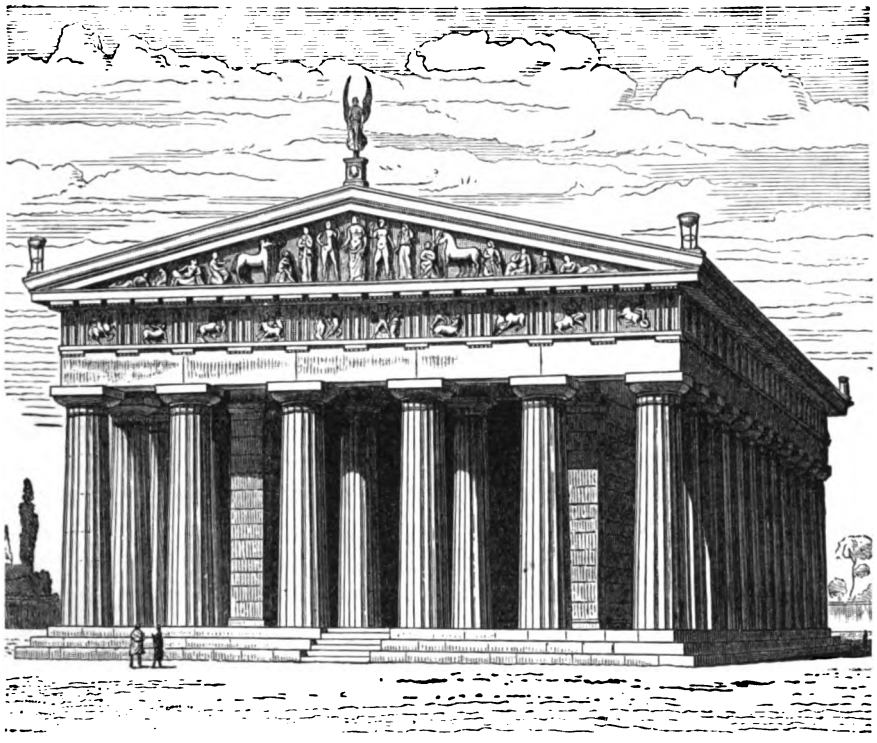


Fig. 127. View of Temple of Zeus at Olympia. (After Restoration.)

walls consisted of brick-work, is one of the marks of high antiquity that distinguish this structure. The tiled roof with its very large circular and parti-colored acroterium is especially noteworthy. No less ancient is the southern part of the Buleuterion (Senate House or Council House), likewise adorned with excellent terra-cotta ornaments; and also the Treasure House of Gela, and that of the people of Megara—buildings of somewhat later origin. The Temple of Zeus at Olympia dates from the end of this epoch. Begun by Libon (of Elis) about 472 B.C. and completed in about fifteen years, it measured 200 feet in length by 87 feet in width, and was surrounded

by a portico of thirty-six columns, about four and three-quarter diameters in height; of massive strength, equally removed from the cumbersome proportions of the Temple at Corinth and from the delicate slenderness of the Athenian buildings. In the interior, two rows of seven columns each divided the cella into a wide nave and two narrow aisles. Here was enthroned the colossal image of the god, wrought in gold and ivory, the masterpiece of Phidias. The German expedition has thoroughly explored the ruined temple, and published an extensive and splendid work illustrating it and its rich plastic decoration.

Fewer remains of that early period are found in Asia Minor and the adjacent islands; the temples having been partly destroyed by earthquakes, and partly covered over by subsequent erections. Yet we know of considerable architectural works constructed here after the middle of the sixth century; among others, the famous Temple of Hera at Samos, a work executed by the masters Rhœcus and Theodorus, in the ruins of which the base of a column has been found displaying a primitive form of the Ionic style; and, above all, that famous wonder of the ancient world, the marble Temple of Artemis at Ephesus, a dipteral building of colossal dimensions, 225 feet broad by 425 feet long, subsequently destroyed by the madness of Herostratus, and again rebuilt by the architects of Alexander the Great. Its columns were 60 feet high, and each architrave beam about 30 feet long; so that especial precaution and care must have been necessary in conveying the mighty blocks of marble to the place assigned them. The temple had eight columns at each end and twenty on each side, but as it was dipteral, the inner row being of six by eighteen columns (the corner columns always counted twice), the whole number of columns was ninety-six, not counting those of the inner vestibules. These columns were all Ionic. Lately, through the excavations undertaken by Mr. Wood, the foundations of the temple, together with considerable remains of the colossal marble colonnade, have been brought to light. These last establish in a convincing manner the often-doubted assertion, that a certain number (thirty-six) of the columns were ornamented on the shaft with sculpture, human figures carved in high relief upon the lower part of the shaft.

Among the most remarkable remains of very ancient art we must reckon the ruins of the Temple of Assos, in the province of Troas, on the coast of Asia Minor. These were minutely explored and carefully excavated by the Archæological Institute of America about 1881-82. Here stood a Doric temple, broad and heavy in form, with compact pillars and projecting capitals, executed in common black calcareous tufa. No trace has been found of a sculptured frieze; the architrave,

on the other hand, is covered with sculptures of a primitive style, showing affinity with the East.

The Second Epoch

extends from about the period of the Persian wars to that of the Macedonian supremacy (about 470-338 B.C.). The national uprising, by which Greece repelled the overpowering numbers of the Asiatic barbarians and victoriously defended her endangered liberty, gave impetus in various directions to her national life, and raised Athens especially—which, like her protecting tutelar goddess Pallas Athene, had become the leader of Hellenic culture—to the height of the loftiest intellectual and spiritual civilization that the world has ever seen. It is true, that in consequence of the Peloponnesian war, which arose from the jealous differences between Sparta and Athens, the incomparable harmony of Greek life was marred by discords; yet the greatness of Hellenic life long continued in its beauty, although no longer in noble dignity, but often clouded by passions; and it was architecture peculiarly, which, in this epoch, freed itself from the last vestiges of its rude, heavy, archaic tendency, and in noble grace and splendid purity created its most marvelous works.

Henceforth in Greece proper, especially in Athens and the region allied with it, is found the starting-point of the progress of the whole culture of the time, and consequently of architectural creations.* The transition from the earlier, severer style is best shown in the temple at Ægina, which seems to have been built immediately after the Persian wars, in honor of Pallas Athene. It is a peripteral building in the Doric style, with the inner rows of columns that belong to an hypæthral structure, and with those famous groups of statues in the pediments which are of such high importance in the history of sculpture. While this work is built of inferior material—limestone with a coating of stucco, only the roof-tiles and the sculptures being formed of marble—in the architectural works that are named below, the most excellent quality of white marble is combined with noble and harmonious form, fostering and making possible the highest perfection. Thus we find the so-called Temple of Theseus at Athens, erected under Cimon, and one of the noblest works of Attic-Doric art. Moderate in dimensions, 45 feet broad by 104 feet long, it has a peripteral colonnade of six pillars by thirteen. The forms here breathe forth the purest harmony, the noblest softness and grace; the

*J. Stuart and N. Revett, "The Antiquities of Athens"; 5 vols., London, 1762. "The Unedited Antiquities of Attica," by the Society of Dilettanti; folio, London.

columns are more slender and farther apart than those of the Sicilian buildings (see the plan, Fig. 114); the echinus of the capitals exhibits a full, moderately projecting profile; and the other members of the upper part of the building harmonize with these proportions in delicate rhythmic feeling. Added to all this, the building, which was built of Pentelic marble, is in excellent preservation, and contains some superior sculpture, consisting of a representation in relief on the pronaos, besides the reliefs in the metopes of the façade. Nearly contemporaneous with this beautiful monument of art are two works of very small dimensions, exhibiting to us the Ionic style as conceived by the Athenians, executed, beside, in a manner thoroughly plain and unassuming. One of these is the now ruined temple on the Ilissus; the other, probably of a somewhat later date, is the Temple of Nikè

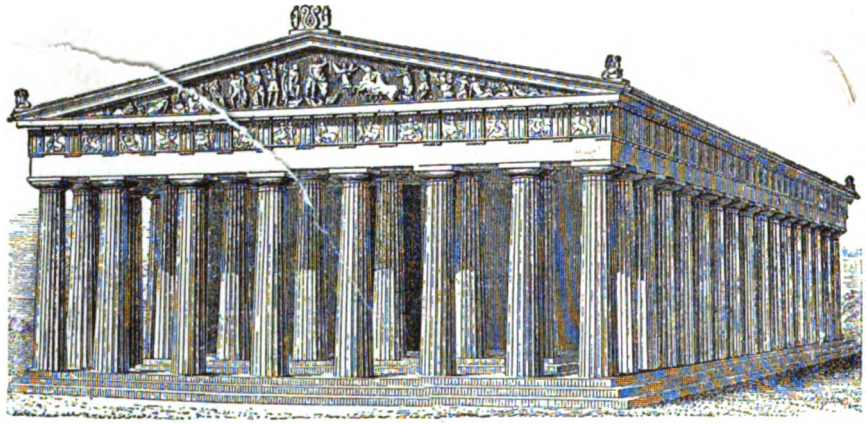


Fig. 128. The Parthenon.

Apteros (the wingless goddess of victory),* erected at the entrance to the Acropolis. Each has a small cella with a prostyle of four pillars as a portico and an opisthodome.

The most magnificent structure arose, a little later, while Pericles had the direction of public affairs and Athens possessed undisputed headship, both political and intellectual. Of those shrines of the Acropolis destroyed by the Persians, the Parthenon (Fig. 128) was the first to be rebuilt, the splendid restoration being accomplished, after sixteen years of labor, in the year B.C. 438. This magnificent temple to the goddess of the city was erected by the masters Ictinus and Callicrates, and was adorned by Phidias and his pupils with rich and splendid sculptures. It was Phidias, also, who at the same time

* Wingless, to express the hope that victory might never desert Athens.

created the colossal chryselephantine image of the goddess for her temple; that is, covered with plates of gold and ivory, of which probably the gold furnished the drapery, the ivory, the nude parts. This

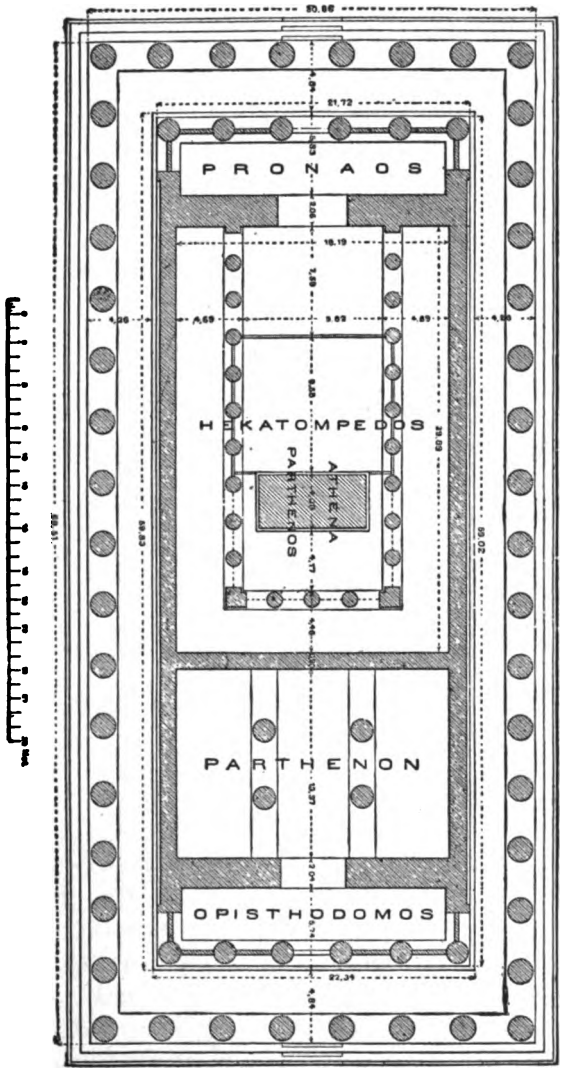


Fig. 129. Ground-Plan of the Parthenon.

and the statue of Zeus, named above, are the most important works of this class of which we have any record. The building was peripteral, of considerable dimensions, 101 feet broad by 227 feet long, with eight pillars at each end, and seventeen on each side (Fig. 129).

The columns are 34 feet in height, and 6 feet in diameter at their base. The Doric style here reached a still greater grace and lightness than even in the Temple of Theseus, and the whole treatment of the detail imparts a no less delicate and elastic vitality to the members. Passing through the pronaos, a cella was reached 63 feet broad by 98 feet long, divided into three naves by two rows of pillars; and above these, undoubtedly, as in the temple at Pæstum, there was a gallery with a second row of columns. At the back of the cella, accessible from the posticum, there was a special opisthodom, in which, probably, the state treasures were preserved. The rich sculptured orna-

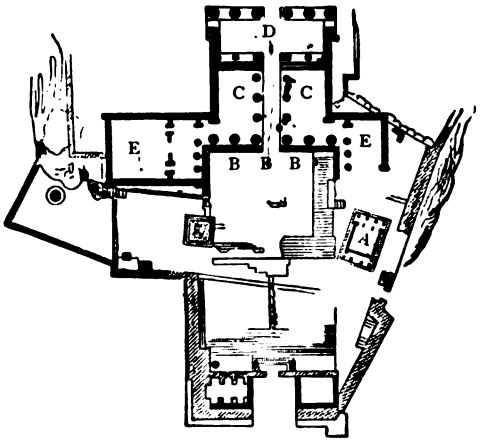


Fig. 130. Ground-Plan of the Propylæa and Neighboring Buildings; Acropolis of Athens.
A, Temple of Nikè Apteros. B B B, the outer gateway, with its six Doric columns. C C, the six Ionic columns. D, the inner gateway with its six Doric columns. E E, the wing-buildings.

ment of the splendid building bears witness at the same time to its importance as a festive temple of the goddess. Contests of giants, centaurs, and similar mythical scenes, filled the metopes; grand groups of statues in both pediments depicted the birth of Athene and her contest with Poseidon; and lastly, within the peristyle, an unbroken frieze of masterly reliefs extended round the cella, perhaps representing the great ceremonial procession at the Panathenaic festival. This temple, transformed by the Christians into a church dedicated to the Virgin, had defied the storms of time in indestructible beauty, until in the seventeenth century (1687), in a war between the Venetians and the Turks, the Venetians, under Count Königsmark, threw a bomb upon the marble roof of the Parthenon, bursting the wondrous structure into two ruined halves; and at the beginning of

the nineteenth century the British Earl of Elgin, having obtained a permit from the court of Constantinople, wrenched from the walls and the entablature the slabs of the cella, frieze, and metopes, leaving the building a ruin. The sculptures so removed, as well as many previously fallen, are in the British Museum, but a few slabs of the cella frieze remain in the building, and others are in the Acropolis Museum.

No less famous was the magnificent gateway, the Propylæa, which was also erected under Pericles, by the architect Mnesicles, at the western entrance to the Acropolis, between the years 436 and 431 B.C. Built with equal grace and equal nobleness of proportion, it displays at the same time the Doric and Ionic styles harmoniously combined. The outer gateway, which has a breadth of 58 feet, is designed as a porch of considerable depth, to which admission is given by five openings between six Doric columns (Fig. 130, B). Within is a roofed hall, divided into three naves by six pillars placed in pairs (Fig. 130 C C), from which we pass by five doors (one principal and four subordinate) into another porch, corresponding with that in front, and opening like it by a colonnade of six Doric pillars (Fig. 130, D). The passage shown in the court, between the two rows of Ionic columns, C C, is left with the natural rock as its only floor, and was evidently meant for beasts and for chariots to pass. Upon both the outer colonnades a complete Doric entablature was placed, but this is curiously modified by the two flanking colonnades of three columns each, the order of these colonnades being also Doric, but on a much smaller scale. The forms of the temple structure are here applied; but at the same time they are modified to suit the especial object of the building. Thus two metopes were placed over the space between the central columns, because the considerable width of the central gate required it. Attached to each side of the porch, as projecting wings, there were smaller buildings (Fig. 130, E E), opening by Doric colonnades into the inclosed central hall, but presenting their closed side-walls on either flank. Especially admirable, however, was the rich ceiling of the three-naved hall, both on account of the bold span of its beams, and the magnificent decoration of the spaces between them (the coffers), which were brilliant with gold and colors. The Ionic form of the columns in the interior also corresponded with this festive, cheerful character; while the two rows of columns on the outside, together with the rest of the exterior of the building, exhibited the seriousness and dignity of the Doric style.

On the other hand, we find the grace and splendor of the Attic-Ionic style in the third magnificent building of the Acropolis, a temple used for the worship of Athene, combined with the ancient shrine of

Erechtheus and the Pandrosium.* This building, commonly called the Erechtheium, comprised many different shrines in several connected courts, and contained not merely the sacred image of the goddess, the tombs of the old heroes of the land, the shrine of the nymph Pandrosus and of Cecrops, but also a number of highly venerated tokens of divinity. This temple also had been destroyed by the Persians; but after the death of Pericles its rebuilding was commenced;

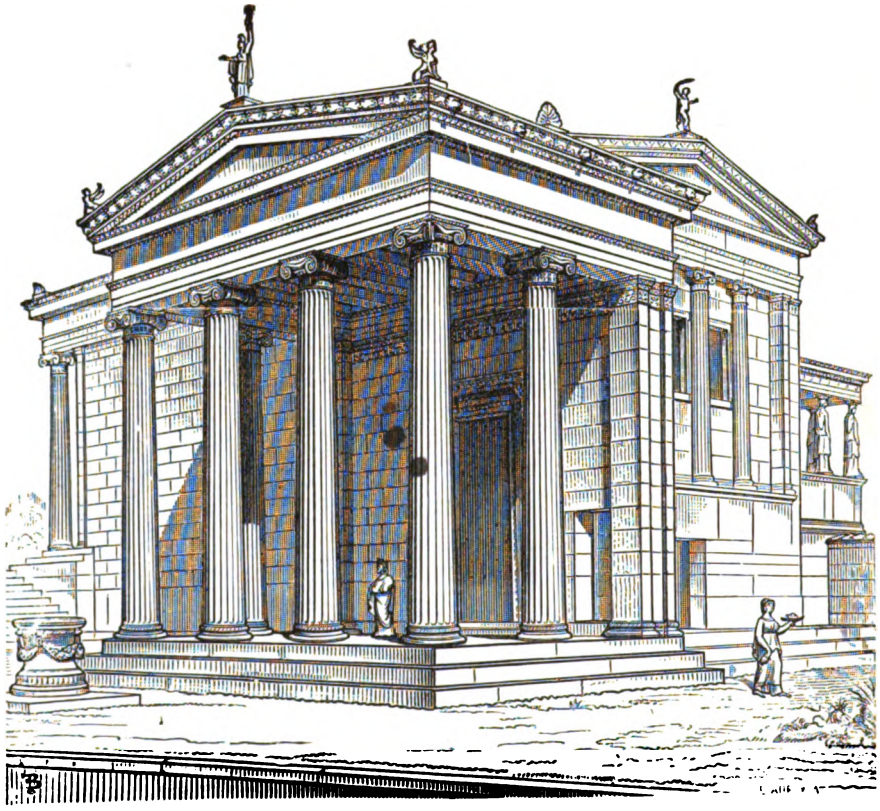


Fig. 131. Northwest View of the Erechtheum.

and recently discovered inscriptions testify that it was not wholly completed in the year 409 B.C. The main building (see Fig. 131) extends in moderate dimensions (37 feet broad by 73 feet long) from east to west, terminating in the east with a splendid porch of six Ionic pillars, and in the west with a wall, the upper part of which had been rebuilt in Roman times with an upper story, having six half-pil-

* Cf. Inwood, "The Erechtheion at Athens"; folio, London, 1827. F. von Quast, "Das Erectheion zu Athen," etc.; Berlin, 1840.

Portico of the Maidens attached to the Erechtheion (Erechtheum) on the Acropolis at Athens. It was not built until the beginning of the third century B.C. *The figures of women treated as supporting members are what are called caryatids. The second from the left-hand corner is a terra-cotta copy of the one taken away by Lord Elgin, and now in the British Museum.*

THE ERECHTHEUM
PORCH OF THE CARYATIDES

lars, with windows between them. This part of the design was therefore opposed to the regular ground-plan of the Greek temple. But on the north side of the western half of the temple there was a stately and unusually magnificent porch of four columns in front and two others in return on the flanks; all the details here being much more rich and splendid than in the eastern porch. Passing through a great door, the elegant sculptured frame of which is still in preservation, the western part of the main building was reached; and, proceeding in a straight line, a second porch, smaller than the one on the north side, was arrived at, built in corresponding design on the south side. Not satisfied with the richness of fancy already displayed in the two first-named porticos, the architect here had recourse to the noble human form in the place of columns; and six statues of Athenian maidens, Caryatides, as they are called, placed upon a high parapet wall, supported the elegant Ionic roof of the porch. In what manner all these various courts were used, and for what they were designed, is a matter of constant dispute among archæologists, owing to the sad destruction of the whole of the interior. The opinion generally received, with some degree of probability is, that the eastern half of the main temple, separated by a wall from the western building, was the proper temple of Athene; that a second partition wall, with an open row of columns parallel with the first wall, extended from the north to the south porch; and that, at all events, the Pandrosium lay in the western part. These investigations are rendered still more difficult by the fact that the building was erected on sloping ground, so that the eastern porch and the whole south side lie considerably higher than all the rest. Apart from these obscurities, however, the pure artistic beauty of the work shines forth all the more clearly. The Attic-Ionic style here reaches a luxuriance and richness of decoration that carries it beyond its peculiar character of chaste elegance. Even the bases of the columns are richly varied from the usual design, and the tori are ornamented with horizontal flutings and wicker-work in relief (see Fig. 120). A brilliant crescendo of the Ionic motive is displayed in the capitals, the cushion-like members being arranged in double rows, one above another, and rolled together in the richest spiral involution; the sculptured echinus is enriched above with a band of wicker-work; and the upper end of the shaft is carved with a rich band of flower-and-leaf ornament. The other parts are also decorated with similar magnificence, especially the capitals of the antæ and the crowning moldings of the walls.

To give an idea of the perfection with which the Greeks understood how to bring into one design an extensive group of buildings with the utmost artistic effect, we have inserted a view of the Acropo-

lis of Athens (Fig. 132). A broad winding road betwen two flights of steps* leads up to the splendid gateway of the Propylæa, the open colonnades of which rise between the side-walls of the two wings. On the right, boldly enthroned on the rocky declivity, stands the elegant Temple of Nikè; while over the roof of the central building towers the brazen colossal statue of Athene, executed by Phidias. The great temple of the goddess, the Parthenon, rises with its forest of pillars and its richly sculptured pediment farther to the right, above

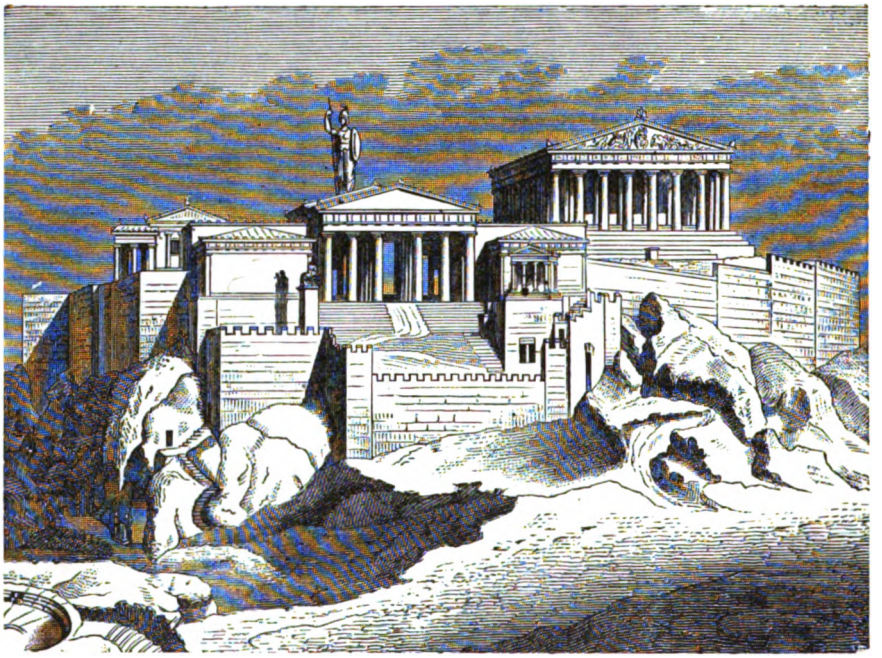


Fig. 132. The Acropolis of Athens, restored. There are errors in the side buildings of the Propylæa.

the walls of the fortification; while in the background to the left a part of the west front of the Erechtheium, with its northern portico, is visible. The whole forms an architectural picture, exhibiting to us in every line the glory of Athens at this period of her grandeur.

In other places, also—for instance, in Attica and the northern parts of the Peloponnesus—the new and brilliant development in the art of architecture accomplished by Athens must have exercised a decided influence on the style of the time. Thus we know that Ictinus, the

* These flights of steps are thought to be of the Roman time, or even much later: and in that case the three steps of the actual stereobate were based upon the rocky ground, from which the visitor stepped directly upon them.

architect of the Parthenon, built the splendid Temple of Demeter at Eleusius, to which subsequently other magnificent buildings were added; the remains also of the Temple of Nemesis at Rhamnus, and the traces that have been discovered of the famous Temple of Jupiter at Olympia, all point to the influence of the Athenian school of architecture. Further, we know that the Temple of Apollo at Bassæ, near Phigalia in Arcadia, which is still partly preserved, and which was also distinguished for its sculptured friezes, was built after the design of Ictinus. This building displays a remarkable combination of two styles, the exterior being executed in the noble Doric style of Attica; while the two rows of columns in the interior, which support the roof of the hypæthral building, follow the Ionic form.

The Third Epoch,

which lasts till the decline of Grecian liberty, shows architecture, it is true, still in varied activity, but no longer adhering to the chaste, harmonious proportions of the former age. Influenced by that loosening of the federal bonds which brought Greece under the dominion of the Macedonians, there arose a striving for attractive effect, and even for a certain piquancy in art; and, owing to the various relations with Asia entered into by Alexander the Great, Oriental luxuriance and sensuality found their way into Hellenic culture. Architecture was now employed principally in designs for theatres (as in the cities of Asia Minor), in splendid palaces for the new capitals (as in Alexandria), and in the luxurious enlargement and adorning of private dwellings, which before had been simple and modest. It was especially employed in massive designs for grand, complex works, and even for entire cities, in executing which, undoubtedly, a general harmony of effect was aimed at. The Doric style was almost wholly lost sight of, or was preserved only in impure forms; on the other hand, the Corinthian style, with its magnificent decoration, must be regarded as the true child of this period.

The transition to this period is marked by the Temple of Athene Alea at Tegea, erected by the sculptor Scopas previous to the year 350 B. C., and famed among the ancients as the largest and most splendid temple of the Peloponnesus. Its importance consisted in the fact that here the three orders of architecture were employed in one design, all equally contributing to the general effect; the peristyle being built in the Doric order, while the columns of the interior belonged to the Ionic and Corinthian styles. Among other temples in Greece we must also mention the Doric Temple of Jupiter at Memea in the Peloponnesus, and the extensive additions which were made to the

shrine of Eleusis, chiefly comprising an inner and an outer propylæon, the latter designed and executed in strict accordance with the central building of the famous Athenian Propylæa; also the buildings at Epidauros, of which one is named above. In Athens itself there are especially some smaller monuments of another kind, in which the graceful elegance and decorative beauty of this later style are attractively exhibited. Foremost among these are some choragic monuments—memorials erected by private persons in honor of a victory obtained by them in public musical contests. The motive of the design in these buildings was to obtain a support for the tripod, which had been received as the reward of victory, which, in the true Greek spirit, was to be placed in the public view as a consecrated gift. For this purpose, either a column was used, the capital of which supported the tripod, or a more extensive substructure was formed for it. The richest and most beautiful of these monuments is that of Lysicrates, erected in honor of a victory obtained in the year 334 B.C. (Fig. 133 and Fig. 121). A slender circular building, surrounded by elegant Corinthian half-columns, rises on a square basement, terminating in a beautifully sculptured frieze and rich cornice, and covered with a marble block five feet in diameter, carved into the form of a flattened dome. On the top of this monument, which

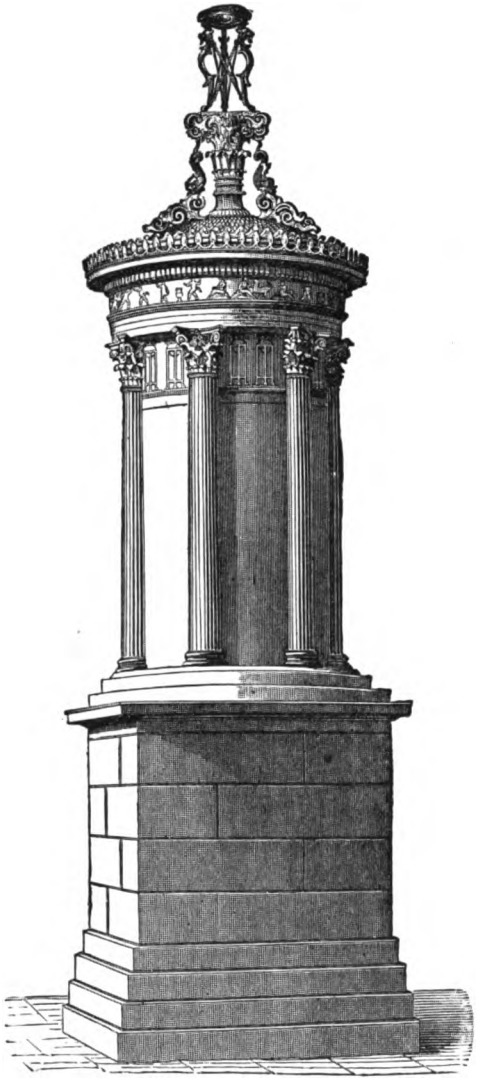


Fig. 133. Monument of Lysicrates.

is 34 feet high, and built of pure Pentelic marble, there rises a rich marble stand, adorned with acanthus leaves and branches, like some marvelous flower with its broad corolla, destined to receive and support the tripod. More simple in its character is the Monument of Thrasyllus, erected in the year 320 B. C., a structure of elegant pillars with an entablature, forming an entrance to a rocky cave, and bearing the tripod on its platform. Among these we may reckon lastly the so-called Tower of the Winds, really a clepsydra, or Water Clock; and known as the Horologion of Andronicus Cyrrhestes. It is 26 feet wide by 42 high (Fig. 134). Executed like the others in marble, it is an octagonal, tower-like building, with two porticos on two sides, each supported by two columns of simple Corinthian design, and with a semicircular apsis projecting from a third side. In the interior were contained the works for a water clock, and on the outside we find engraved the lines of a sun dial. On the walls are figures of the eight winds represented in high relief, one on the frieze of each side of the building. This interesting monument is, at the same time, a good instance of the ingenuity and fancy by which the Greeks elevated into artistic beauty even the most utilitarian objects. An aqueduct belonging to it is curiously formed in arcades, each of which, however, is cut out of a single marble block. The true art of the keystone, and of the arch depending upon it, does not seem, according to all appearance, to have been known to the Greeks of the pre-Roman time.

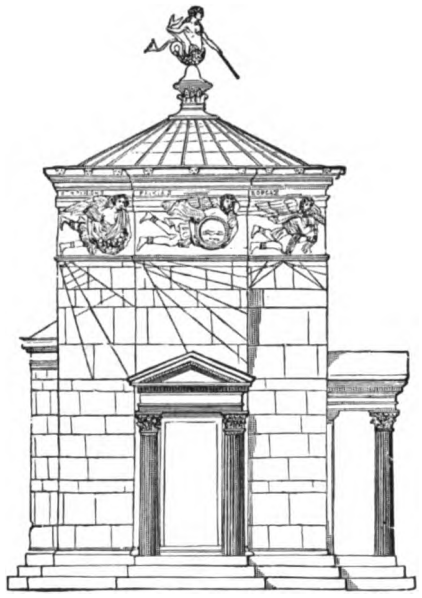


Fig. 134. So-called Tower of the Winds, at Athens.

The western colonies of Greece have fewer remains to show of monuments belonging to this later period; yet among the Sicilian works we may mention as the most important a remarkable tomb at Agrigentum, called, without reason, the Tomb of Theron (Fig. 135). Square in plan, and rising with a tapering profile, the small tower-like building is interesting from the mixture of different styles in its decoration; the superstructure having Ionic half-columns at the

angles, supporting a Doric entablature with a triglyph frieze. We may here also mention the so-called Temple of Demeter at Pæstum, a peripteral building of small dimensions, which, in the treatment of its details, gives evidence of a gradual decline in the true appreciation of the Doric forms.

A number of splendid monuments, most of them, unfortunately, however, in a deplorable state of decay from natural causes, are spread over Asia Minor.* In these the Ionic style attains its utmost richness and magnificence. Thus there is, for instance, the Temple of

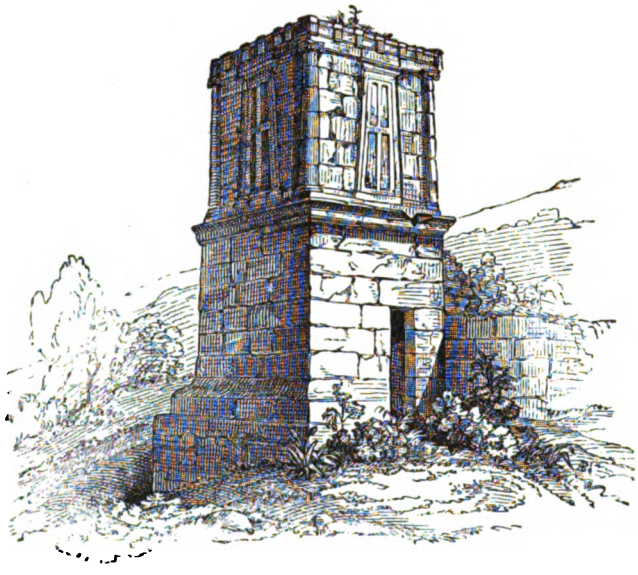


Fig. 135. The So-Called Tomb of Theron at Agrigentum.

Athene, at Priene in Caria, built by Pytheus about the year 340 B.C., and consecrated by Alexander the Great himself; it is a peripteral temple, with six columns at each end, and eleven on each side. It is 64 feet broad by 116 feet long, and is a peculiarly luxurious yet noble example of the Ionic style (Fig. 119). The most splendid work, however, of this group, is the famous Temple of the Didymæan Apollo at Miletus, a dipteral building, with ten pillars at each end, and twenty-one on each side. It is 164 feet broad, and 303 feet long. Besides some remains of Ionic columns of the peristyle, the fragments are preserved of the perfectly developed Corinthian capital of one of the engaged columns at the entrance, as well as some beautiful

* "Ionian Antiquities," by the Society of Dilettanti; 3 vols., folio, London. Texier, "Description de l'Asie Mineure." etc.; 3 vols., folio, Paris.

pilaster capitals (Fig. 136), and a sculptured frieze from the interior, representing griffins moving from either side toward a lyre, and beautiful leaf ornamentation. To this period also, lastly, belong the Temple of Bacchus at Teos, built by Hermogenes toward the end of the fourth century—an Ionic peripteral temple, with eight pillars at the ends; the magnificent Temple of Diana at Magnesia, built by the same master, a pseudo-dipteral, 98 feet in breadth, and 216 feet in length; the Temple of Venus at Aphrodisias, constructed on a similar plan, with eight pillars by thirteen; and, lastly, the Temple of Jupiter at Aizani, also a pseudo-dipteral building, 68 feet broad, and 114 feet long, with eight pillars by fifteen, which have excessive slenderness of form, their height being equal to ten of their diameters. One of the most important architectural works of this period is the Mausoleum at Halicarnassus,* (Fig. 137), the colossal tomb erected

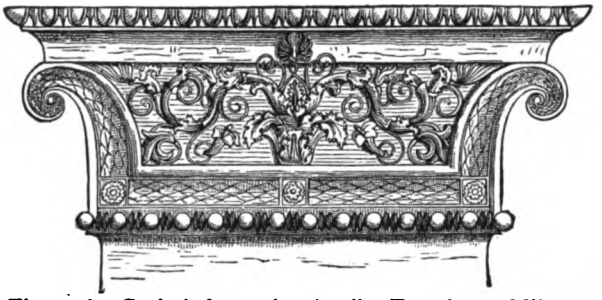


Fig. 136. Capital from the Apollo Temple at Miletus.

by Queen Artemisia to her husband Mausolus, who died 354 B.C., which combined, like the before-mentioned Nereid monument at Xanthus, the old Oriental tomb-design with the elegant forms of Greek art. Above a rectangular, almost square substructure, which contained the tomb, rose an Ionic peristyle temple, with nine pillars at each end and eleven on the sides, and decorated with a magnificent frieze. The roof formed, in true Western Asiatic fashion, a terraced pyramid, the platform on the top of which was crowned with a colossal marble quadriga, in which was the statue of Mausolus. Considerable remains have been excavated of the rich sculptured ornaments of this building, in which the first masters of the age, such as Scopas and Leochares, emulated each other.

Finally, we must here mention works at Olympia; the Metroon, a small peripteral temple of the later Doric period, with Corinthian engaged columns inside; and the Philippeion, a circular temple,

* C. T. Newton, "A History of Discoveries at Halicarnassus, Cnidus, and Branchidæ"; London, 1862.

erected by Philip of Macedon after the battle of Chaeroneia. This building is surrounded by a colonnade of Ionic columns, and its interior is also broken by Corinthian engaged columns. Then must be named the splendid buildings of the citadel of Pergamon, in Asia Minor, which was excavated and explored by the Prussian government; the temple of Athena, a Doric peripteros somewhat after the design of the latter part of the fourth century,* and connected with this the beautiful colonnades, added later under Eumenes II., sur-

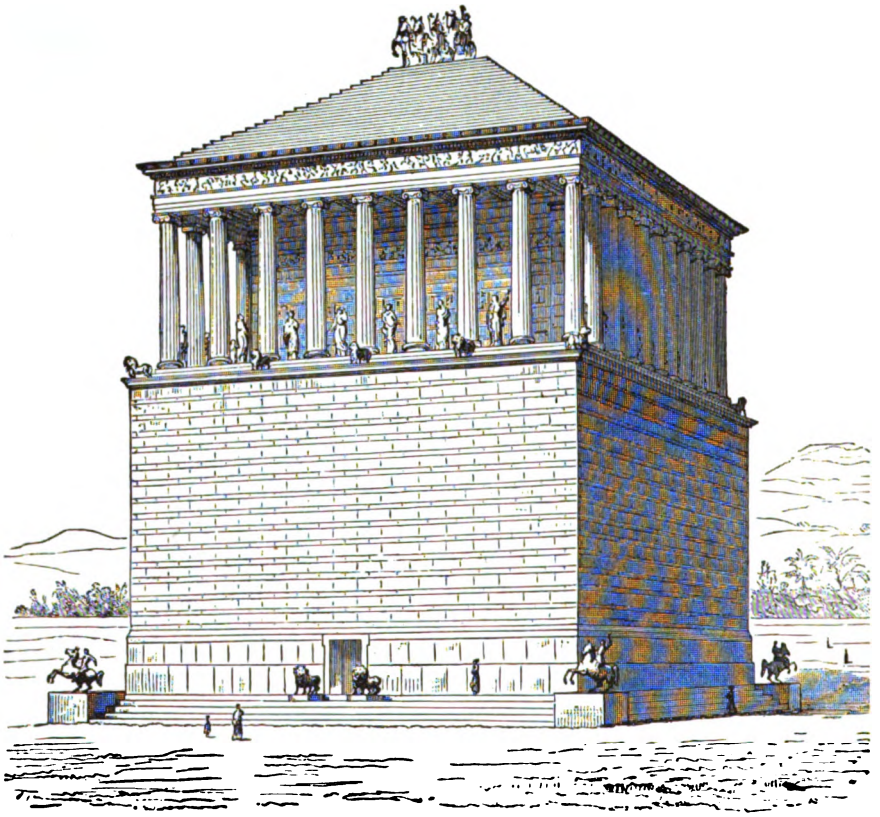


Fig. 137. Mausoleum at Halicarnassus.

rounding the temenos in two stories, on the north and south sides. Above all we must remark the Altar of Zeus, an almost quadrangular structure, with a broad double staircase out in the front and a large

* "Alterthümer von Pergamos," vol. ii. of "Das Heiligthum der Athena Polias Nikephoros," by R. Bohn; Berlin, 1885. Plates.

platform encompassed by an elegant Ionic portico. The most important parts of this unexampled monument are the friezes in relief, of which more is said in the section Sculpture.

3. *Greek Plastic Art.*

A.—SUBJECT AND FORM.

The imagination of the Greeks delighted in sculpture; the art, therefore, in which they took precedence of all other nations, and will ever take precedence, was the plastic art. The very character of their temple architecture was thoroughly plastic; and it is not too much to say that that architecture would have been different but for the early development of the arts of form independent of utility and of construction. Architectural decoration, as understood by the Indians, or afterward by the people of mediæval Europe, hardly reached a great development among the Greeks; they were so perfectly content with sculpture of the human form perfectly developed. We find the deeper ground for this phenomenon lying in the natural endowment of the Greek character, which presents an unusual balance between mental and physical qualities. No flaw in these two agents engendered either reflection or sentimentality; harmoniously blended, reason and sentiment found in each other alternately their limitation, their check, and their support. In healthful exuberance and power, body and mind coöperated with each other. The equal nurture of all innate powers and capacities belongs to the idea of a free-born Greek; and only he who had arrived at perfection in all artistic and gymnastic exercises obtained the honorable title of "noble and good." But never was any one allowed to develop his power either for his own personal enjoyment or for the adornment of his own existence; every man belonged wholly and entirely to the common public life, and individual power and talent was valued only in its relation to the state.

From these circumstances plastic art received its definite character. Where the individual in himself was of so little importance, where the reference to general and clearly defined aims governed everything, artistic taste must have applied itself rather to the representation of outward events than to the depicting of an inward mental condition. Where individual life in general receded behind the common interests of the state, plastic art must have devoted itself rather to the glorification of gods and heroes than of ordinary human beings; rather to the ideal events of legends than the real doings of daily life. Even the historical life of the nation, when, like some fresh spring, it

forced its way into the creations of art, was transformed or idealized into the spirit of myth or legend. As the moral and political ideas of different races, or the interests common to the country at large, were embodied in the forms of the gods, so did plastic art find in these its first and highest inducement to creative activity. Poetry had even preceded it in this, and in the immortal verse of Homer had first given fixed forms to the gods of Olympus and to the old legends of the Hellenic heroes. From this store of distinct and finished creations later dramatic poetry drew its riches; and even the idealistic philosophy of a Plato may be traced to it. The nation looked upon these ideas and images as sacred, and only by reverential adherence to them could plastic art take possession of the same material. Hence, in the whole history of Hellenic life, we find this adherence to tradition, this fostering of the transmitted type, which always remained the same at the core, and which progressive stages of development only endeavored to invest with a richer and more life-like veil.

Hence Greek art found its highest splendor in the images of the gods. Homer had glorified the national conceptions in his verse, and had represented the gods in perfect human form, as acting and suffering, gracious or angry, endowed with all human passions. If the East had filled its spirit with a mystical system of belief, with uncomprehended legends and profound fantastic subtleties, and therefore could portray the forms of the gods only by symbolical divergencies from nature, producing monstrous deformity of the general idea, in the clear pure myths of the Greeks all misty immensity vanished, and man created the gods after his own image. Although at all times whole stages of child-like helplessness had to be passed through, in which man only succeeded in forming a puppet-like idol; although, in the earliest Greek divinities, much of the monstrous creations of the East was still preserved—as in the hundred-breasted Diana of the Ephesians, or the four-armed Apollo of the Lacedæmonians—still, the clear Greek mind soon discovered the right way of investing its gods with the sublimity and beauty of the human form. This way was the observation and apprehension of nature. The expressive beauty of that Southern race assisted the instinct of the artificer by sharpening and practising the eye in the contemplation of beauty. Still more favorable were the free habits of the Hellenes, which allowed the body an unfettered development; the life of the free-born citizen prevented the stunted growth arising from sedentary occupation; and, lastly, the exercises of the gymnasium, which early steeled the body, rendered it flexible, and allowed it to attain to an harmonious perfection. Thus the race itself became more beautiful, manly, and noble; and at the same time these public gymnasiums

afforded artists an abundance of the most beautiful images of youthful physical strength, dexterity, and grace.

But there was another circumstance, also, which accustomed the eye of the sculptor to beauty; and this lay in the drapery, which clung to the body in such a noble, expressive manner that every form and movement was marked by the rich fall of the folds. Simple and natural in style, the Greek dress consisted of a longer or shorter undergarment (the chiton), a sleeveless shirt, worn without a girdle, and a mantle-like upper garment (the himation), which was only a large four-square piece of cloth thrown over the shoulder and the left arm, and drawn either above or below the right arm. Hence the "cut" of the dress did not rest with the tailor, but every man arranged his own garment; and the manner in which this was done betrayed the character and culture of the wearer.

While thus the life itself gave the artist every opportunity to make the beautiful his own, and to steep in it all his ideas, and saturate them with it, the ideal origin of his art urged him to imbue it with importance. Only grand and universal characteristics could give to the figures of gods or heroes the stamp of power. All casual and arbitrary forms were therefore justly set aside, and attention was given only to the essential and standard type. As Greek art aimed not so much at a delineation of the mental life as of bodily movement and attitudes, the importance of the body as a whole, asserted itself rather than that of the countenance, with its special expression of whatever might be passing in the mind. Thus it was that Hellenic plastic art had long understood how to represent the human body both in repose and in violent action, while the head remained stiff and inanimate. But even when it had reached the highest point of development, the art that was concerned with portraying physical beauty could not allow the harmony of any part of the work to be disturbed; and in this spirit it fashioned the character of the head, never investing it with that superior and dominant life which bursts out when art aims at representing the emotions of the mind and its moods and feelings.

Even in the heads of Hellenic statues, in the "Greek profile," this becomes evident. The varied human countenance appears reduced to one common type. In the whole form of the face one general character is decidedly expressed. The features follow each other with soft transitions; yet each is clearly formed and finished, and no part comes prominently forward at the expense of another. The organs of understanding appear only in due proportion with those which express the faculty of sensuous enjoyment; the brow is, indeed, by nature, superior to the parts around the mouth, but this preponder-

ance is not increased by an especially great development. Delicately arched, and rather low than high, rather narrow than broad, the brow passes, almost as if in continuation, into the marked and prominent nose, without any indentation in the profile, and so on into the lower parts of the face; thus expressing, in the pregnant language of form, no contrast, but rather an harmonious combination of mind and sensuous feeling. The large, well-cut eye lies in its broad, deep socket, betraying both in position and direction a firm taking hold of reality. The cheek softly swells sideways from its lower edge to the well-formed ear; and the curve is continued downward to the chin, which projects with a strong curve, and, with the full but well-defined lips, exhibits energy and animal spirits. The whole face is formed into a fine oval, and is rendered perfect by a similarly well-proportioned cranium. The entire outline of the head is refined, slender, and rather high than broad. Slight deviations from this form suffice to intimate the various differences in the characters represented, and to express the powerful and the tender, the manly and the feminine, blooming youth, maturity, or old age. Here, too, Greek art keeps within the limits of general types of character, without striving after individual traits. It is satisfied with the expression of the highest sovereign will and sovereign mind in Zeus; with that of lofty womanly dignity in Hera; of heroic, manly power in Hercules; of youthful beauty, either of a refined or luxurious character, in Apollo and Bacchus; of perfect grace in Aphrodite; of noble, just wisdom in Pallas Athene; of maiden-like vigor in Artemis; of manly adroitness and cunning in Hermes; and other similar creations, in which the round of human characters and qualities are typically established in broad lineaments, and which serve as a general standard. Whatever lay beyond this, passed also beyond the power of Hellenic perception; and it would have been perfectly incompatible with the Greek nature to represent individual character in the modern sense. It is true that portrait statues were known among the Greeks; but we may suppose that they were not intended to emphasize individual peculiarities, but to preserve the memory of the man in idealized features as that of an able and excellent being. That he was such, was proved by the fact that the state had decreed such an honorary statue as a reward. And here, again, the idea was expressed, that the individual man, in the best days of Greece, was in no case to be portrayed for himself, but was an object for notice and representation only in his relation to the community.

The fundamental object of Hellenic plastic art—namely, to embody only the idealized and generalized type—perhaps appears nowhere so strikingly as in those representations which seem especially

to demand a naturalistic treatment; namely, those of animals. He who would ask what the kingdom of the "irrational creature" has to do with the ideal, need only be referred to the Greek sculptures. These teach us how the ancient sculptors, even in this apparently subordinate sphere, by a grand conception of the essential elements, and by the exclusion of all that is merely accidental, produced works which, as it were, transport the laws of physical form into a higher sphere, and thus make their animal creations fit to appear among the gods and heroes of the Greek Olympus.

But here, however, it resulted as a necessary consequence, that the fact of nature was everywhere obliged to yield when it came into opposition with the principle of ideal art. Hence the larger animals were, without hesitation, fashioned smaller than nature dictates, when the composition of the artistic whole required it, or when the subordinate importance of the animal was to be expressed; thus, for instance, in the incomparable frieze-reliefs of the Parthenon, in which the horses are very much smaller in proportion than any which could possibly be used for battle and for burden, and in many other places, as especially in late Greek pictorial reliefs. Even fantastically devised combinations of human and animal forms are treated in a manner utterly opposed to Oriental conceptions. Among the Greeks they are regarded only as subordinate creatures, while in the East they serve to express the highest divine beings. If a Greek wished to give to a horse, for instance, other than equine qualities, the head and breast, as the nobler parts, are fashioned in human form, and the limbs of animals other than human are reserved for the lower organs.

In all this we readily perceive the great contrast which Hellenic plastic art presents to that of the East. Fantastic and naturalistic ideas appear side by side in the East, without being blended together: the one we find in the embodiment of mythological conceptions; the other in the chronicle-like representation of royal life with its ceremonial, or in that of historical events, or of every-day life. All this is, however, only superficially conceived, and amounts solely to accurate characterization and a faithful portrayal of events. Among the Greeks, where imagination and understanding harmoniously intermingle, the two extremes lose their one-sidedness, and blend into a noble ideal conception, equally removed from that fantastic art which thought to portray the divine by shapeless deformity, as from that homely prose which never looks below the surface of actual life, and never surmises a deeper meaning. And how could it have been otherwise, when in religious matters, among the Greeks, the forms of the gods were created as ideal embodiments of their innermost nature by the same free national mind which gave its own impress to

their political life, and thus, in every artistic work it produced, celebrated its own glorification? Hence, therefore, the cheerful, calm self-content, the quiet grandeur and freedom, in which creations of Hellenic art stand before us.

By this idealism the application of the plastic art was also determined. Emanating from religious ideas, its seat of activity was especially in the temple. As the image of the god soon rose from the rude, puppet-like idol to the ideal form endowed with mind and life, the same transformation becomes apparent in the material; the gaudily painted, carved wooden image being supplanted by statues made—or rather, with the surface formed—of gold and ivory. These costly colossal works are noted above; and it may be mentioned here that great care was needed to keep them in good condition; especially were they continually anointed with olive oil. Of another kind are the acroliths, wooden images, clothed, or painted, or even covered with thin plates of gold; the nude parts—the heads, arms, and feet—being formed of marble. Soon, however, the wood was completely supplanted by the materials of white marble and bronze; a relic of the old splendor of color and material remained behind in the polychromatic decoration of the statues.* Not merely the hem of the garments, but sometimes the whole attire, was colored; and not merely weapons, diadems, and similar appendages were rendered conspicuous by gilding, but even the hair was frequently gilded, and the pupil of the eye darkened. In the bronze statues, the hem of the garment was frequently adorned with ornaments of precious metal, the white of the eye was formed of silver, and the pupil by dark precious stones. The greatest find of painted statues ever made was that of 1886, on the Acropolis rock in Athens; and the statues are kept in the Acropolis Museum.

Besides this, the temple claimed its plastic ornamentation, and in its various parts afforded abundant opportunity for sculpture. The pediment contained groups of statues, in the management of which the difficulties of the space were ingeniously overcome: the metopes in the Doric temples were adorned with alto-reliefs; and wherever, as in the Ionic building, continuous friezes presented themselves, they were used for larger connected compositions in relief. While in the buildings of the East architecture and sculpture intermingled without regard to limitation, in the Greek building the clear distribution of spaces in the structure itself allotted certain parts in which the

* Cf. the paper by F. Kugler, "Ueber die Polychromie der Griechischen Architektur und Sculptur," reprinted with additions in the "Kleinen Schriften zur Kunstgeschichte," vol. i., p. 265 *et seq.* Hittorf, "Restitution du Temple d'Empédocle à Selinonte"; Paris, 1851. Semper, "Der Stil"; 2 vols., Frankfort-on-Main, 1860.

sculptor could freely and independently insert his work in harmony with the whole organism. Thus plastic art became independent of the sway of architectural authority; yet at the same time it was restrained by the laws of the building it adorned, so that now for the first time it was able to develop its ideas in beautiful freedom, but without extravagance. The first law of this style was to represent the human body either in noble repose or in free activity, even to the expression of passionate emotion, and at the same time, by the rhythm of the masses and by a due regard to symmetry, to bring out successfully the harmony of the architectural organism. Thus everything coöperated to produce that perfect beauty which arises from the blending of the freedom of individual life with the universal laws of art.

In what way this principle of Hellenic sculpture was gradually developed, and how it was modified in the different epochs, will better appear in our historical review.

B.—THE EPOCHS OF GREEK ART, AND THEIR REMAINS.

As in architecture, so also in the sculpture of the Hellenes, a long course of development, covering centuries, is hidden from our knowledge. The scanty remains which exist afford us but an inadequate idea of the primitive attempts of the people; yet even these must have been preceded by many stages. The Greeks themselves, in the historical period, knew but little more than we, and for them tradition clothed the birth and the growth of the plastic art in the poetic garment of legend. These legends tell us of the families of the Telchines and the Dactyli—undoubtedly companies of artisans, as their names imply; that of the one pointing to the art of smelting metals, and that of the other referring to handiwork in general. The decoration of the oldest shrines, and the most ancient images of the gods, were ascribed to them; and so fabulously old did these latter appear to the Greeks themselves, as to give rise to the legend that they had fallen from heaven. It is evident that, in those early statues, art had not yet been awakened; rather it was left to the pious imagination of the faithful to worship these almost shapeless, gaudily painted, dressed-up wooden puppets, as symbols only of the gods. The name of Dædalus, the cunning carver (δαιδάλλειν, to carve cunningly), not only reveals the fact that the earliest idols of the gods in Greece were images carved of wood, but with his name is associated a great advance made in their artistic treatment, since we are told that he opened the hitherto-closed eyes of the statues, and gave action both to the

legs, which up to his time had remained unseparated, and to the arms, which hung stiffly down close to the sides of the body.

The art of that heroic period meets us with great distinctness and variety in the verse of Homer. We there find special mention made of the working of precious metals; and vessels and implements of every kind—pitchers, goblets, bowls, armor, sword-belts, and shields —are decorated with rich figure-subjects. The most famous work of this kind, the shield of Achilles, forged by Hephæstus himself, was entirely covered with metaphorical scenes of peaceful shepherd life, the bustle of a town, and contests of every kind. These representations belong to the very same class of subjects found in the reliefs of Assyria. It is the conception of actual life in its breadth and fulness, already conspicuous in the older art, which here evidently still in connection with Eastern art, becomes a subject for plastic representation.

The existing art of this early period is what we know as Mycenæan, and is described above. There is a great break, or gap, which at present we cannot fill up or supply, between that art and even the earliest monuments of true Grecian art; but we meet with more definite historical records of various artistic undertakings, ascribed to human authors as early as the seventh century B. C. With these we shall begin—

The First Epoch

of Greek plastic art, so far as it can be historically authenticated. One of the most important works of this kind was the chest of Cypselus, sent by the Cypselides, the tyrants of Corinth, as an offering to the Temple of Hera at Olympia. It was a chest of cedar-wood, covered with carved mythical representations, and inlaid work of gold and ivory. The description given by Pausanias of this remarkable work shows an important advance in the subjects represented, compared with the scenes of actual life to which the works of the Homeric period were confined. Here, for instance, in five rows, one above another, were scenes illustrating old Hellenic legends and mythical tales of the gods—a depth and widening of artistic conception which points to an important revolution in the general intellectual life. Another famous work must have belonged to the same class—the Throne of Apollo at Amyclæ, in the territory of Lacedæmon, a work executed by Bathycles of Magnesia, who lived about 550 B.C. Here, too, the sides were covered with mythological subjects in relief; the supports of the throne were statues; and the whole work sustained an ancient bronze image of Apollo, "in shape resembling

a pillar." With the production of such works as these, the improvement in technical skill went hand in hand; the invention of bronze-casting, for instance, which is ascribed to Rhœcus and Theodorus, the architects of the Temple of Hera at Samos.

Among the earliest artists, belonging to the beginning of the sixth century, must be counted Melas of Chios, who is reported to have been the first to practice technique in marble. This intimation has of late been confirmed to a certain extent by the discovery, at Delos, of a Nikè, unfortunately mutilated, which is attested by an inscription to be the joint product of Mikkiades, son of Melas, and of Archermos, son of the former.* While this remarkable work, in its rigid bearing, stereotyped smile, and conventional treatment of the hair and drapery, still appears severely archaic, it evinces great boldness on the part of the sculptors.†

Fig. 138. Bronze Head of Zeus from Olympia. (From Bötticher.)

While the names of these and other sculptors indicate a lively activity in art on the coast of Asia Minor and the adjacent islands, there is no lack of records respecting an equally eager pursuit of art in Greece proper, in the years before the beginning of the fifth century B.C. Here it seems to have been the Peloponnesus, and especially the ancient capitals Argos and Sicyon, which were the principal seats of artistic activity. The two famous masters, natives of Crete, Dipœnus and Scyllis, were employed there, and founded an influential school of art. Among their works we hear not only of images of the gods, but also of statues of heroes, often in large groups, in which, for the first time, marble was extensively used, as well as a combination of gold and ivory. Thus, in this period of great activity, both intellectual and technical progress worked together in bringing about a marked improvement in the art of sculpture.

Some of the monuments still preserved afford us a lively idea of what Greek art could achieve at this period.

Among several works of early antiquity brought to light on the site of Olympia, a bronze relief is probably one of the earliest.

* Though the inscription is imperfect, and several readings of it have been offered, the sense seems to be nearly as above.

† Cf. H. Heydemann, in Lützow's "Zeitschrift"; 1889, p. 81, with illustration.

The disposition, in rows, of its embossed reliefs, reminds one of descriptions of the Chest of Cypselus. On the lower field there is a winged Artemis, who holds two lions. The lifelike air of the lions forms a sharp contrast to the solemn repose of the goddess. Next comes Hercules in combat with a centaur, endowed with a complete human form, to which a horse's body is attached behind in the manner of the earliest representations of the centaur. Two winged griffins in a parallel position fill the third, and three eagles the fourth field. In the whole realm of Greek art, apparently nothing more ancient has so far come to light. Essentially more developed, but still very primitive, are several bronze statuettes representing Zeus; particularly, however, a bronze head of Zeus, distinctly revealing the earliest type of the god, with his long, pointed beard and curly double crown of locks (Fig. 138). Still more austere is the colossal head of Hera, fashioned of limestone, and, notwithstanding all its awkwardness, betraying the effort to give expression to the gentle and withal majestic nature of the supreme deity's consort. The lips parted by a smile and the large, dilated eyes of the goddess are very characteristic; and also the high diadem (polos), under which the closely flattened wavy locks are visible; and the ear, which is treated with uncommon awkwardness. A stage only little more advanced is indicated by the reliefs on the gable of the treasure-house of the Megarenes at Olympia, representing with archaic severity, yet with great vigor, the battle of the Titans. This is the earliest among such compositions of Greece known to us.

Fig. 139. Metope-Relief from Selinus.

By far the earliest works are the remarkable sculptures of the Temple at Assos, which are now in the museum of the Louvre in Paris. They consist of shallow reliefs, executed in blackish calcareous tufa, in a clumsy style that calls to mind the Assyrian monuments. Covering the architrave in unbroken succession, they approach nearer to Asiatic than to Greek art, even in their subjects; contests between lions and bulls; men at drinking-bouts; fantastic devices, such as sphinxes, centaurs, and men with fishes' tails. Next follow the metope reliefs of the oldest of the temples at Selinus, in Sicily, now in the museum at Palermo. Two only are in complete

preservation; nothing but fragments are left of a third, representing a chariot drawn by four horses. The two works extant represent Perseus killing the Medusa in the presence of Pallas, and Hercules carrying away two Cercopes, goblin-like demons, hanging from a staff borne on his (Fig. 139) shoulder. The style of this representation is extraordinarily severe, almost repulsive. The Medusa is thoroughly distorted; the other figures are formless and heavy; the faces are mask-like and stiff, with large, staring eyes, projecting and compressed lips, broad forehead, and prominent nose. Still more awkward is the archaic distortion of all the figures; the upper part of the body presenting a front view, while the legs and feet are seen in profile, and as if advancing—a peculiarity found also in ancient Oriental art. Nevertheless, this remarkable work is not deficient in a just observation of life, and in a correct though somewhat exaggerated type of form; indeed, in the due filling of the space allotted, and in a certain bold freedom, a lively and artistic creative power makes itself felt in spite of all the harsh limitations of style. Old traces of polychromatic work, of the red painting of the background and the edges of the drapery, add to the primitive character of the work, the origin of which may be placed in the beginning of the sixth century B.C.*

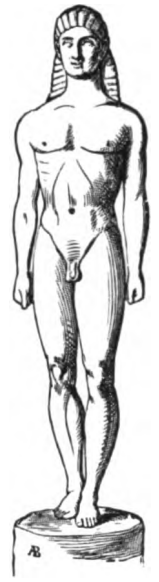


Fig. 140. Apollo of Tenea.

Other works of the same epoch, belonging to a similar stage of development, and yet differing from these in the conception of the form of the body, belong to Greece proper. These are chiefly marble statues, such as that called the Apollo of Thera from the island on which it was found, now in the National Museum at Athens, and a similar nude statue found at Tenea near Corinth, now in the Glyptothek at Munich (Fig. 140). In the slender form of the body a decided contrast is here exhibited to the heavy muscularity of the works at Selinus; the limbs, although severe and rigid, show a better understanding and less exaggeration. On the other hand, there is the same mask-like smile and lack of expression in the countenance, and the same awkwardness in allowing the soles of both feet to rest on the ground, although in motion. More nearly related to these works are some Attic monuments belonging to the same early period; among them the stele in relief of Aristion, according to its inscription the work of Aristocles, long in the museum of the Temple of The-

* O. Benndorf, "Die Metopen von Selinunt; Berlin, 1873.

seus, and now in the National Museum. It exhibits the same motionless bearing, the same fettered step, the same conscientious execution, and combines with all this a skilful filling-up of the surface of the narrow pier allotted to it. Belonging to the same class of works is a tombstone lately unearthed at Orchomenos, on which is sculptured the figure of a man wrapped in a mantle, and leaning on a staff; he holds out a cicada to his dog, while his faithful companion springs up, and leaps upon his master. We perceive from these works how early Greek art, by keen observation and understanding of realities, trained itself for its greater tasks.

If, in the monuments we have considered, the differences between the severe Doric art of Sicily and that of Hellas proper, softened as it was by Attic refinement, are plainly perceived, on the other hand

Fig. 141. From the Harpy Monument from Xanthus. (British Museum.)

some remarkable works in Asia Minor afford us a glance into the early development of the more luxuriously soft Ionic art. Mention must be made, in the first place, of the numerous remains in the Island of Cyprus, which are now in Paris in the collection of the Louvre, because in these the blending with Oriental art is most distinctly apparent; for as the island from its position invited colonization from the most different quarters, Phœnician settlements existing side by side with Hellenic colonies, this intermingling is also reflected in its works of art. About a hundred heads and torsos of male statues, executed in a light tufa-like limestone, are to be seen in the Louvre. Many have a diadem of laurels; but all have the same antique and stiff type of form which the Apollo of Tenea exhibits. Some are represented as stepping slightly forward, with arms closely attached to the body. The conventional treatment of the hair in parallel curls and ringlets is also familiar to us in the Apollo statue.

Frequently the Egyptian apron appears; which must, therefore, have been the native dress of a part of the inhabitants. This seems also confirmed by the Cyprian torso in the museum at Berlin, in whose attire Assyrian ornaments and the Greek Medusa head are combined with Egyptian form. Similar stiffness, with an outline otherwise tolerably soft and undefined, is to be found in the remarkable statue in the Louvre from Idalium, the drapery of which is formed by the Greek peplos with its conventional folds. To this class also belong the ten colossal marble sitting figures of men and women recently placed in the British Museum, which formerly, after the manner of

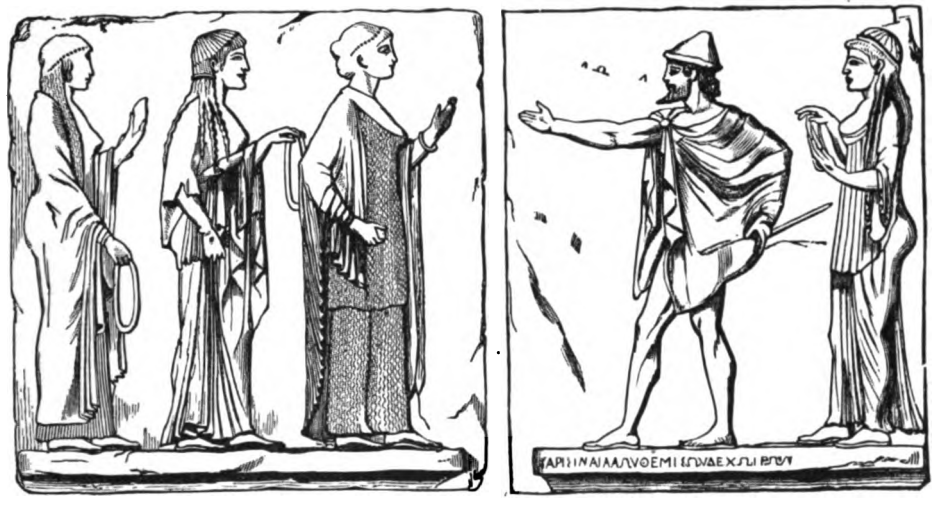


Fig. 142. Relief from Thasos.

the Egyptian sphinx avenues, bordered the road from the harbor to the old temple of the Didymæan Apollo at Melitus in Asia Minor. With all their stiffness of bearing they exhibit remarkable softness and roundness of form, combined with heaviness of proportion, and an execution rather suggestive than sharply defined.*

Most important are the reliefs discovered at Xanthus in Lycia, and now to be seen in the British Museum; they belong to the Harpy Monument—a pier-shaped memorial, along the upper edge of which is a frieze ornamented in relief. Although the subjects are derived from indisputably foreign Oriental myths, yet, in spite of its softness, the style of these marble works is Greek. Our representation of a small part of the frieze (Fig. 141), which consists of twelve slabs, exhibits the goddess of life sitting on a throne, and holding fruit and

* Cf. the illustrations in Newton's work on Halicarnassus.

blossoms in her hand. Three women approach her with reverence; the first holds her dress in an antique manner, and throws back her veil; the two others present offerings of flowers, pomegranates, and eggs. On two other sides, between similar scenes, there are figures of Harpies carrying off children. The elegant arrangement of the hair and drapery, which falls only in parallel folds, the stiff, smiling expression of the countenances, as well as the gait, are altogether in keeping with the primitive character of this epoch.

Nearly related to these important works is the great relief slab, now in the Villa Albani in Rome, which was formerly erroneously supposed to represent Leucothea. It belonged, probably, to a tomb; and the subject is a family scene, which is represented with exquisite delicacy. A female figure, strongly resembling, in the style of treatment, the relief on the Harpy Monument, is sitting upon a chair, and holding in her arms a young child, which reaches out its little hand to her as if desiring to caress her. Another female stands before the woman on the chair, and appears to be giving her a piece of cloth. Near this second woman stand two others. A thoughtful, tender touch of sentiment is wafted to us from this relief, like a breath from the ancient Attic art.

The same delicacy, crossed, it may be, with something of archaic want of skill, meets us in the large relief lately found on the Ionian Island of Thasos, and now in the Louvre at Paris. There are three slabs, which appear to have formed the front and sides of a tomb. On the broadest slab, which made the front of the tomb, there is a niche shaped like a door, having on the left a figure of Apollo with a cithara in his hand, who is being crowned by a young woman; while on the right, three other nymphs, or Graces (Charites), are moving toward the door. On one of the two smaller side slabs there are three more advancing female figures, and on the other a single figure of a woman, who is preceded by a Hermes, who seems to be acting as guide (see Fig. 142).* The neat execution, and the modest reserve of the lightly stepping maidens, contrasts in a striking manner with the figures of the two gods, already somewhat more free and animated in their action.

This small review of works still in good preservation belonging to the same period, and conceived with the same archaic restraint, makes us aware that there were distinct differences of style in the various localities where the art was exercised; and this observation is confirmed by what the ancient writers record respecting the various

* For a cut of the whole of this relief, of which only the two side slabs are here shown, see Lübke's "History of Sculpture," English edition, p. 96. It was found by E. Miller in 1864. The largest of the three slabs is 2.10 metres long by 92 centimetres high.

art schools of Greece at this period. Hellas, and especially the Peloponnesus, now stands in the foremost rank. In Argos we find mention of Ageladas as a famous master, actively engaged probably from about 515 to 455 B.C., famous for his bronze statues of gods and Olympic victors, and still more famous for his three great pupils, Phidias, Myron, and Polycletus, the brilliant constellation of the highest of the epoch of Greek art. In Sicyon, at the same time, there lived with his brother Aristocles, the founder of a vital and enduring school, the still more famous Canachus, who executed the colossal statue of Apollo at Miletus,* and who was skilled not only in casting in bronze and in the use of gold and ivory, but also in wood-carving. Ægina, then a commercial island as yet not subjugated by Athens, was rendered illustrious by the two masters Callon and Onatas, the latter especially known by several groups of bronze statues, and warlike scenes from heroic legends. Lastly, Athens possessed among other artists Hegias (or Hegesias), already important in art history as teacher of Phidias; and Critius, who, together with Nesiotes, made the famous group of the tyrannicides, Harmodius and Aristogeiton, after an older one by Antenor had been carried off by Xerxes in 480. Of this important group we have a copy upon certain Athenian coins, and upon a marble chair (Fig. 143), as well as a later repetition in two marble statues in the museum at Naples, one of which is disfigured by the addition of a much later head. We recognize with what truth to nature the old master has chosen the moment when Harmodius with his drawn sword is rushing forward, covered and protected by his friend. After all, all that we know of these masters, whose works have perished, is limited to general statements that their style was severe, hard, and archaic; and, although certain distinctions are made between them, we cannot gain from these any clear idea of their essential characteristics.

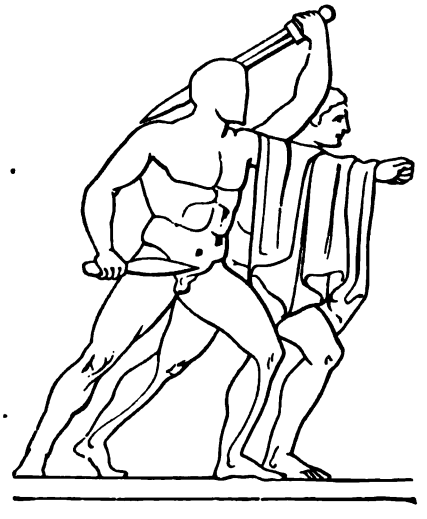


Fig. 143. Copy of the Group of the Athenian Tyrannicides at Naples.

* For a cut of the Apollo by Canachus, see Lübke's "History of Sculpture," English edition, p. 98.

It is of all the greater importance that the recent excavations on the Acropolis at Athens have brought to light a number of female figures, in marble, the largest of which is proven by inscriptions to be the work of Antenor, son of Eumaros; statues which have been spoken of above, in reference to their elaborate painting. These exquisite statues,* in which archaic constraint is combined with a

A B
Fig. 144. Female Statues from the Acropolis.

progress from austerity (Fig. 144A) to gracefulness (Fig. 144B), were more or less damaged during the devastation of the Persians, and were buried by the Athenians when it was intended to rebuild the old sanctuaries on a new ground-plan. The more refined statues are probably the figures of priestesses, robed in the peplos, falling in graceful folds and slightly raised by the left hand, while the right

* Colored illustrations in "Antike Denkmale des Inst.," i., plate 10. Cf. Rhomaides et Caviadias, "Les Musées d'Athènes"; parts 1, 2, Athens, 1886.

holds a piece of fruit; as in Fig. 144B. Extremely important are the numerous traces on these statues of polychromatic decoration, as mentioned above. The lips were also painted; the hair, encircling the brow in ringlets, and falling in braids over either breast, is red; the eyes were marked by means of colored stone or glass paste. The dress is painted with borders and patterns over the whole surface. A delicate sweetness hovers over the majority of these works, to which a touch of archaic restraint and austerity imparts a singular charm.

In the earlier years of the nineteenth century were discovered the famous groups of statues from the Temple of Athena at Ægina. Their origin may be placed with great probability between 500 and

Fig. 145. Statues on the Western Pediment of Temple at Ægina now at Munich.

480 B.C.; they now belong to the treasures of the Glyptothek at Munich, but unfortunately they have been elaborately restored. The eleven figures of the west gable are very nearly complete; and of those on the east, so much is left that here, also, even the details of the composition can be ascertained. In both compartments the subjects refer to the contests between the Greeks and Trojans; in both there is a dispute over the corpse of a fallen Greek, whom Pallas Athene herself takes under her protection by stepping between the combatants. In the center of the western pediment the goddess stands fully equipped with helmet and coat of mail, and with spear and shield, covering a fallen body, toward which an enemy, bending forward, is stretching out his arms (Fig. 145). On both sides, in symmetrical arrangement, two warriors are hastening for-

ward with uplifted spears, and these are followed by two kneeling figures, the one holding a bow, and the other a lance; each of the extreme angles of the pediment is filled by the prostrate figure of a wounded man. A similar arrangement, only differing in the details, and presenting figures in other attitudes, is repeated in the other pediment. On the western side the subject of dispute is the body of

Fig. 146. Bust of a Woman, Acropolis.

Achilles, which Ajax and other heroes are wresting from the Trojans, among whom we may recognize Paris by his Phrygian head-dress and Asiatic *trousers;* on the eastern side it is the body of Oikles, which Hercules and Telamon are defending against the Trojan Laomedon. As in the one Paris is characterized by his peculiar costume, so here we recognize Hercules by the lion's skin. All the rest, with the exception of the goddess, are entirely naked, having only a

helmet covering the short, crisp hair. The figures are executed with the utmost knowledge and masterly skill; life and action are expressed with unsurpassable power in the strongly strained muscles and swelling veins. If in this these Æginetan works pass a step beyond the Apollo of Tenea, they excel still more decidedly in the freedom and energy with which the figures are represented in the most different attitudes—in passionate onset, kneeling down, falling, and bending forward. At the same time, nothing is to be seen here but a strict and coarse observance of nature, unsoftened by idealism; the figures are rather athletic than heroic, and the artist has had in view rather physical vigor than beauty of form. The more perfectly, however, every movement is expressed in the body, the more striking is the contrast of the vacant expression of the faces with their archaic smile. The same master who so well understood the play of the muscles of the body had no comprehension of those emotions which vibrate electrically in the countenance; or, more probably, thought it foreign to plastic art to express them; hence the faces of his heroes reveal to us nothing of their inner feelings, nothing even of the excitement of the contest. Lastly, the figure of the goddess is rigidly erect; and although it was certainly a legitimate aim to mark her as a powerful protecting deity by the mere solemnity of her appearance, yet the awkwardness of her attitude is an evidence of the strict rules by which art was at that time fettered in the representation of the gods. On the other hand, the laws regarding the filling up of the architectural space are excellently adhered to. Finally, it is not to be denied that the figures in the eastern pediment, especially those of Hercules and the dying warrior, are superior in their truth to nature, and in the expression of the heads, to the stiff and constrained figures of the western pediment, and betray the progress of a younger generation.

To a somewhat later period belong the metope reliefs which are now in the museum at Palermo, and which originally ornamented a temple at Selinus, more recent than that of the Medusa named above. They represent various battle scenes, the tragic fate of Actæon, the meeting of Jupiter and Juno, and Hercules in contest with an Amazon. They show great energy in their drawing, freedom of composition, and, on the whole, a thorough knowledge of anatomy, which is executed in an extremely lifelike manner. The type of head is modeled on those of the earlier works at Selinus; a primitive, an archaic conception is plainly expressed in the regularly curled hair, rigid lips, and heavy eyelids (Fig. 146); yet the fresh and lifelike expression of the heads is decidedly superior to the stiffness of those at Ægina. The material is a calcareous tufa, much disintegrated; the head, hands, and feet of the female figures are of white marble.

The other works belonging to this early period are, for the most part, not to be traced to any definite locality. In the later age of a more developed art, the archaic style was accepted by preference for certain statues of the gods; and by the parallel folds of the drapery, the regularly curled hair, and imitated severity of feature, an attempt was made to reproduce the impression of those old works. Yet generally, in a certain graceful way of holding the hands, and in the position of the feet, and sometimes even in apparently insignificant accessories, the later origin of the work is betrayed. Among these archaizing works we must mention the famous statue of Pallas Athena at Dresden, without head or arms, where the extremely life-like battle scenes in relief on the front of the drapery give the lie to the stiff folds of the peplum; also the delicately executed statue of Diana at Naples, and the altar of the twelve gods at Paris, and others.

Fig. 147. Disk-Thrower, after Myron. (The statue of the Palazzo Massimi.)

The transition to the following epoch, the period of art's highest prime, is formed by some masters, who are pointed out, it is true, as representatives of the ancients, but who, by their more delicate execution, as well as by their wider range of subject, approach the freedom and perfection of the highest period. The first of these is Calamis of Athens, a highly versatile and productive artist. Images of gods, heroic female figures, horses with riders, and chariots with four horses are mentioned among his creations. He worked in marble, bronze, gold, and ivory; and even some smaller productions of his chisel were much esteemed. His horses are said to have been unsurpassable, and his female figures noble in form; and thus a touch of finer life probably distinguished his works from those of his predecessors. A statue of Hermes bearing a ram on his shoulders, which he made for the city of Tanagra in Bœotia,* is known to us only by

* Described by C. von Lützow in the "Annals of the Institute," 1869. For cut of this statue see Mahaffy's "Rambles and Studies in Greece."

copies. In a relief lately discovered at Athens, the elements of this composition are repeated with all the delicacy of the old Attic art. Almost contemporaneous with him, in the first half of the fifth century B.C. (about 470), lived Pythagoras of Rhegium, an artist of Græcia Magna. He executed his lifelike and strongly developed works exclusively in bronze, and among them his contests of heroes and his athletic statues of the victors are especially praised. Like him in his more naturalistic tendency, but of far greater importance, was Myron, whose chief works belong to Athens. He, too, preferred bronze to every other material; but in the subjects of his art he was far more varied than Pythagoras. His images of the gods, representations of heroes, and statues of victorious athletes, have been much extolled. Among the latter the runner Ladas has been highly praised, and also the no less admired disk-thrower (discobolus), to the excellence of which many marble copies—above all, the excellent one in the Massimi Palace and the one in the Vatican at Rome—bear witness (Fig. 147). We find in it the most acute observation of life, the most just conception of bold, rapid movement, and the greatest freedom in the expression of the action. Besides these, certain figures of animals by this great master were judged to excel all others by their inimitable truthfulness to nature. Among them the famous "cow" excited universal admiration; yet we cannot, out of all the many witty epigrams that were made upon it, get a satisfactory notion of what it was like* in attitude or action.

Fig. 148. Marsyas, after Myron.

* "All the epigrams unite in praising especially its truthfulness and naturalness, and cannot enough exaggerate the possibility of its being taken by mistake for a real animal. A lion will tear the cow to pieces; a bull will leap it; a calf will suck it; the rest of the herd will join it; the herdsman will throw a stone at it to make it move on; he strikes it, he whips it, he pipes to it; the farmer brings yoke and plow to harness it; a thief would steal it; a gadfly would fasten on its hide; yes, Myron himself would confound it with the other cows of his herd."—GOETHE, *Myron's Kuh.*

The same vivacity of expression is seen in the marble statue of a Satyr in the Lateran Museum, in which, as is believed, is also found the copy of a work by Myron (Fig. 148). It is supposed to be that statue of Marsyas who has found the flute which Athene threw away, and, full of joy, is in the act of appropriating it. An incorrect restoration which has put castanets into the hands of the figure has hindered its true interpretation.

With this last-named master, art had reached the highest freedom in the representation of the forms of the body. It had victoriously overcome every difficulty in the representation of outward life, and was now sufficiently ripe to satisfy fully the demands of ideal conception. At this point begins—

The Second Epoch,

the period of that wonderful elevation of Hellenic life which was ushered in by the glorious victory over the Persians, and only too speedily reached its termination in the Peloponnesian war which was kindled by the jealousy of Sparta. Now, for the first time, in opposition to the barbarians, the national Hellenic mind rose to the highest consciousness of noble independence and dignity. Athens concentrated within herself, as in a focus, the whole exuberance and many-sidedness of Greek life, and glorified it into beautiful unity. Now, for the first time, the deepest thoughts of the Hellenic mind were embodied in sculpture; and the figures of the gods rose to that solemn sublimity in which art embodied the idea of divinity in purely human form. This victory of the new time over the old was effected by the power of Phidias, one of the most wonderful artist-minds of all times.

He was the son of Charmides, and was born at Athens about the year 500 B.C. At first he is said to have been attracted to painting; but he soon turned his attention to sculpture, in which Hegias and Ageladas instructed him. The first period of his activity belongs to the time of Cimon's administration. He did not, however, reach the highest perfection of his art until the rule of his great friend Pericles; and this period embraces his mature manhood and the close of his life, which may be reckoned at about his sixty-eighth year. After having embodied in sculpture the highest ideas of the Hellenic mind, and become the admiration of his time, he was shamefully accused in his old age by the enemies of Pericles; and, being condemned to imprisonment by the fickle people, he died soon after, probably of poison.

We know far more of the works of his mind, which were the admiration of all antiquity, than we do of the outward circumstances of

his life. To the early epoch of his life many great works certainly belong, especially a group of bronze figures representing heroes of the land of Attica, of which Miltiades was the central figure, and which was placed at Delphi by the Athenian people as a thank-offering for the victory at Marathon; also a statue of Athene, at Platæa, but, above all, the colossal bronze image of Athene, which stood on the Acropolis at Athens, and which was visible from far out at sea to those approaching land. The Athenians erected it, in memory of the victory over the Persians, with the booty taken from the enemy at Marathon. A slight memorial of the statue is that preserved on Attic coins. Unfortunately, however, the representation is so various, that we are left in doubt respecting many essential points. Sometimes the goddess is standing, with her shield in her right hand by her side, while the left grasps the lance; another time her left arm is guarded by the shield, while she supports herself with her right arm resting on the lance. The latter position seems the more probable, as it affords ground for the designation of Pallas Promachos (Pallas foremost in the battle); and the former more peaceful bearing meets us in another work by Phidias. The height of the statue with the pedestal cannot have amounted to much less than 70 feet.

The activity of Phidias found a grander and wider field in the magnificent undertakings with which Pericles enriched his native city. We know that, in the noble buildings with which the great Athenian adorned the Acropolis, the most important post was assigned to the direction and influence of Phidias; and we may suppose that the grand design of these works was in a great measure due to his genius. Not merely had he, with the help of his pupils, to provide the inexhaustibly rich sculptured ornament of the Parthenon, the splendid festive Temple of Athene, but to him was intrusted the execution of the celebrated statue of the goddess herself. This statue, which had utterly disappeared long before the temple was destroyed, was a figure about 40 feet high, covered with gold and ivory. The Athenians erected it with the booty taken at Salamis; and the gold alone with which the statue was adorned was valued at 44 talents, equal to $589,875 of our money. Here, too, the virgin goddess was standing erect, not, however, with her shield raised as the vigorous champion of her people, but as a peaceful, protecting, and victory-giving divinity. A golden helmet covered her beautiful and earnest head; a coat of mail, with the head of the Medusa carved in ivory, concealed her bosom; and long, flowing golden drapery enveloped her whole figure. Her shield was placed on the ground, leaning against her lance in sign of peace; under the shield was coiled the serpent, the protector of the citadel, as we know from a small marble copy found

at Athens. A statue of Nikè, six feet high, holding a golden chaplet, and with wings wide-spread, stood upon the outstretched hand of the goddess, in allusion to the prizes of victory, which here, in the presence of the goddess, were presented by the magistrates of the city to the victors in the Panathenæan games* The splendor of the material was, however, surpassed by the profusion of artistic ornament. The undraped parts were formed of ivory; the eyes, of sparkling precious stones; the drapery, hair, and weapons, of gold. A sphinx adorned the center of the helmet, and two griffins the sides. On the outside of the shield contests with Amazons were represented, and on the inside the war between the gods and the giants was engraved; and even the edge of the sandals was ornamented by the artist with combats of centaurs, while a bass-relief of the birth of Pandora surrounded the pedestal on which the statue stood. A fragment of a marble shield recently found at Athens contains a late copy of the contests with Amazons on the shield of the goddess. All this richness of decoration, however, only served to increase still more the grand simplicity and quiet dignity of the whole figure. In it Phidias portrayed for all ages the character of Athene, the serious goddess of wisdom, the mild protectress of Attica; and the noblest of the statues of Athene which have come down to us afford us even now a faint echo of this, their much-extolled prototype.

Still more than in this statue the austere maidenliness of the goddess was elevated into noble intellectual beauty in a figure of Athene placed on the Acropolis by the Lemnians; so much so, that an old epigram institutes a comparison with the Aphrodite of Praxiteles at Cnidus, and calls Paris a mere cow-driver for not giving the apple to Athene.

The Athene of the Parthenon was completed and consecrated in the year 437 B.C. This, together with the rich plastic ornaments of the temple, would alone render the master the first sculptor of all ages. After the completion of his works on the Acropolis, Phidias was summoned to Elis with a band of his best pupils. The state had an atelier built for him, which in later times was reverently cared for and pointed out. In the year 432 B.C., upon the completion of his work, he returned, laden with honors, to his native city. Nevertheless, in the evening of his life he was yet to execute a work which, according to the verdict of all antiquity, eclipsed all other works, and was justly extolled as the highest creation of plastic art; namely, the colossal gold and ivory statue of Jupiter at Olympia. The father of

* This description is in part based upon a statuette found at Athens during the last quarter of the nineteenth century, which is thought, from the ancient description of the great original work itself, to be a copy.

the gods and of men was seated on a splendid throne in the cella of his temple at Olympia, his head encircled with a golden olive-wreath; in his right hand he held Nikè, who bore a fillet of victory in her hands, and a golden wreath on her head; in his left hand rested the richly decorated scepter. Here, too, an allusion to the Olympic games and the distribution of the rewards of victory was expressed by the presence of the goddess of victory. In contrast with the sublime simplicity of the figure, the throne of the god was a work of the richest and most varied art, adorned with gold and precious stones, ebony and ivory. Goddesses of victory, four above and two below, were placed upon each foot of the throne; and the reliefs on the cross-rails represented the eight ancient kinds of contest at the Olympian

Fig. 149. Coin of Elis. (From Overbeck.)

games, and the contests of Hercules and Theseus with the Amazons. Besides this, supplementary supports placed between the feet helped to sustain the heavily burdened seat; and the lower part consisted of bars on which the painter Panænus had executed representations from the heroic legends. Figures of sphinxes, and reliefs portraying the fate of Niobe's children, were placed on the substructure of the throne; the back was carved with figures of the Graces (Charites) and the Hours (Horæ); on the footstool were golden lions and Amazonian contests; and lastly, on the base itself, there were reliefs depicting the figures of the gods.

Certain coins of Elis give an idea of the earnest, thoughtful expression of the head; as also, on the reverse, a notion of the design of the statue itself (Fig. 149). On the other hand, we find in later busts—of which the finest is the colossal marble bust from Otricoli, now in the Vatican (Fig. 150)—a much freer conception and a more realistic handling of what many have thought the general design of the Olympian head.

For more than eight hundred years the statue of the god was enthroned uninjured in his temple, until both were destroyed by fire in the fifth century after Christ.

We have abundant testimony that all antiquity was enchanted with the sublime expression of the Zeus of Phidias. All Greece made pilgrimages to it, and every one who had seen it was pronounced happy. The highly cultivated Roman Æmilius Paulus, declared that the god

Fig. 150. Bust of Jupiter from Otricoli. (Vatican.)

himself seemed present to him; others considered the sight of it a magic charm that could make care and suffering forgotten; and another Roman says that Phidias in his Zeus has given a fresh impulse to religion itself. Most affectingly, however, is the unsurpassable character of the work expressed in that beautiful legend which tells us that Phidias, after the completion of his statue, stood thoughtfully contemplating his work, and, raising his hands in prayer to Zeus, implored a sign from heaven to know if his work was pleasing to the

god. Then suddenly, through the opening in the roof, a bolt from heaven struck the temple floor, as an unmistakable sign of the approval of the Thunderer.

Besides these principal works, several famous statues of Aphrodite were executed by Phidias, chief among them one at Elis, made of

Fig. 151. Juno. Possibly by Alcamenes. (In the Ludovisi Palace, Rome.)

gold and ivory. Here, also, it was not the grace that charms the senses which the sculptor portrayed, but the divine sublimity of an Aphrodite-Urania.

That Phidias especially excelled in creating images of the gods, and that he preferred, as subjects for his art, those among the divinities the essence of whose nature was spiritual majesty, marks the fundamental characteristic of his art, and explains its superiority, not only to all that had been produced before his time, but to all that

was contemporary with him, and to all that came after him. Possessed of that unsurpassable masterly power in the representation of the physical form to which Greek art, shortly before his time, had attained by unceasing endeavor, his lofty genius was called upon to

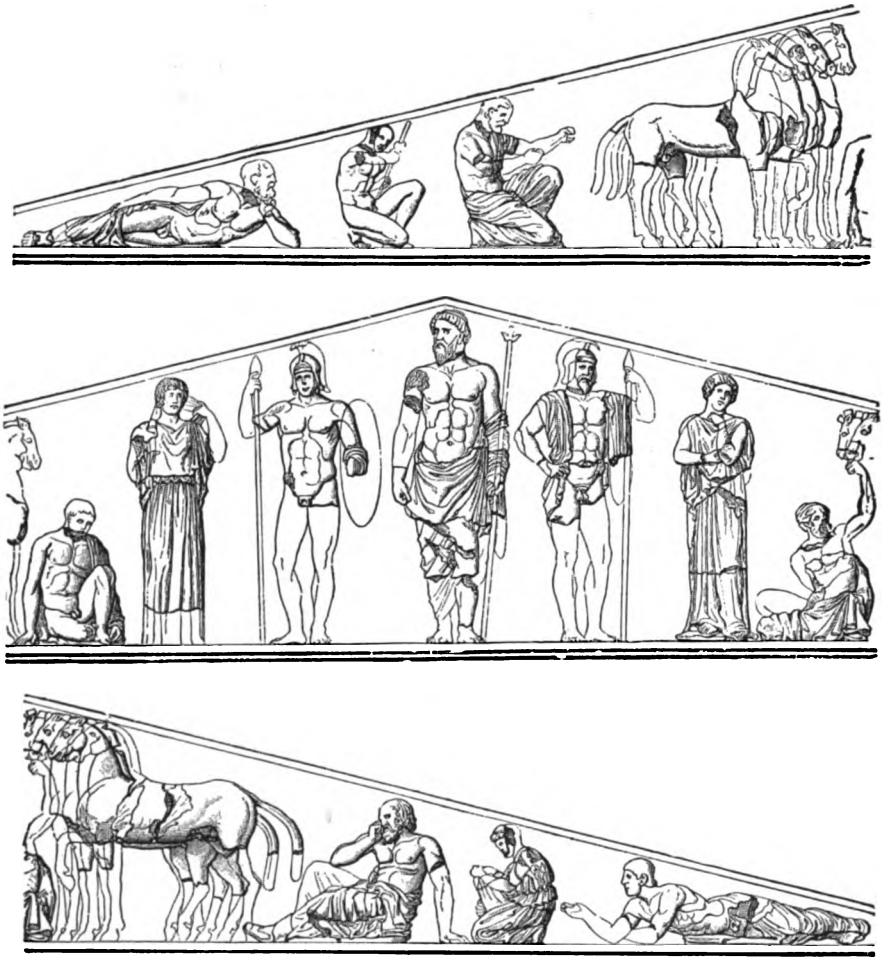


Fig. 152. Eastern Pediment of the Temple of Zeus at Olympia. (From Bötticher.)

apply these results to the embodiment of the highest ideas, and thus to invest art with the character of sublimity, as well as with the attributes of perfect beauty. Hence it is said of him, that he alone had seen images of the gods, and he alone had made them visible to others. Even in the story that, in emulation with other masters, he made an Amazon, and was defeated in the contest by his great con-

temporary Polycletus, we see a confirmation of the ideal tendency of his art. But that his works realized the highest conceptions of the people, and embodied the ideal of the Hellenic conception of the divinity, is proved by the universal admiration of the ancient world. This sublimity of conception was combined in him with an inexhaustible exuberance of creative fancy, an incomparable care in the completion of his work, and a masterly power in overcoming every difficulty, both in the technical execution and in the material. We shall estimate this more thoroughly when we come to the examination of the Parthenon sculptures. Before, however, we consider these, we must cast a glance at the pupils and associates who assisted the great master in his extensive undertakings.

The most distinguished of these seems to have been Alcamenes, whom we can trace down to the year 402 B.C. From the fact that he chiefly produced images of the gods, it is probable that he shared mostly in the ideal tendency of his master. Besides a marble Aphrodite-Urania in Athens, and two statues of Athene, one of which was placed as a votive offering in the Temple of Hercules at Thebes after the expulsion of the thirty tyrants by Thrasybulus, he is also named as the author of a three-formed Hekate on the ante of the southern wall of the citadel at Athens. In addition to these, he executed the statues of Ares and Hephæstus, Asclepius and Dionysus, and, lastly, a statue of Hera, which he placed in a temple between Athens and the harbor Phalerus. Possibly the noble bust of Juno in the Villa Ludovisi, at Rome (Fig. 151), which was formerly ascribed to Polycletus, may give us a notion of the conception of Alcamenes. Besides these, he designed the group of statues for the west pediment of the temple at Olympia representing the contest between the Centaurs and the Lapithæ. Alcamenes shows himself, therefore, to have been a versatile and imaginative disciple of his master. Next to him, the most important of the pupils seem to have been Agoracritus, the especial favorite of Phidias; and, in all probability, his works were similar in character to those of his master; assisted Phidias in executing the colossus of Zeus at Olympia and left several beautiful works, principally in gold and ivory, in Elis; and Colotes, who is said to have had especial skill in the working of ivory and gold.

A more independent position, it seems, must be assigned to Pæonius, who, according to Pausanias, designed for the Temple of Zeus at Olympia the group in the eastern pediment. These works were unearthed in the excavations carried on at the expense of the German government.* Almost the entire pediment has been recon-

* Cf. "Die Ausgrabungen zu Olympia"; i.-v., Berlin, 1876. Also the definitive work on the excavations.

structed with tolerable certainty, and it exhibits a remarkably austere, symmetrical, and archaically restrained arrangement, in which the spirit of the Æginetan sculpture, rather than the more developed style of the Parthenon, is manifest. Still more surprising here, as

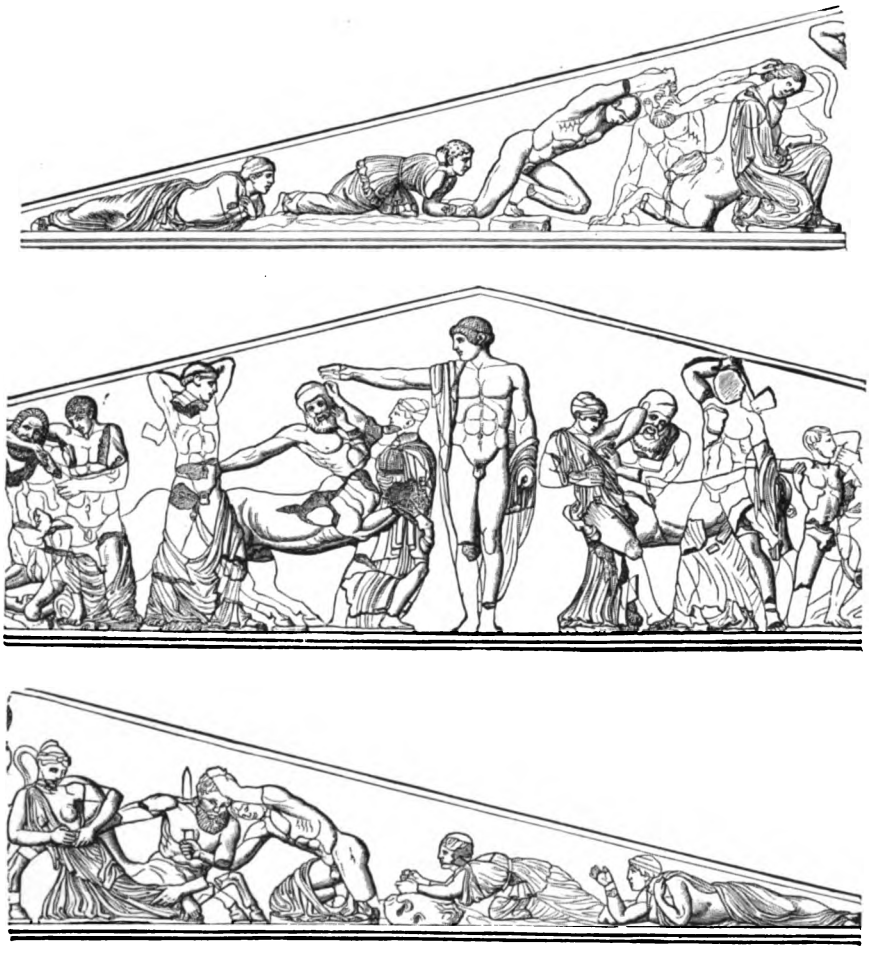


Fig. 153. Western Pediment of the Temple of Zeus at Olympia. (From Bötticher.)

also in the group by Alcamenes in the western pediment, is the architectural or decorative, and, in part, mechanical, character of the modeling, which is especially noticeable in the crude and unsuggestive drapery of leather-like stiffness, whose inharmonious effect is still further enhanced by certain realistic features. It is to be supposed that much depended upon the painting; also it may be thought that

Alcamenes and Pæonius furnished only the first models for the work, which was then executed by mediocre sculptors.

As contrasted with the inferior provincial art, the classical value of Attic sculpture, must be rated all the higher. At any rate, the works from the temple of Zeus at Olympia rank with the most noteworthy accessions to our store of plastic monuments. The first of the subjects in question to be considered are the groups in the pediments, which are well preserved in their most important parts. The eastern group, according to Pausanias the work of Pæonius (Fig. 152), depicts the preparation for the contest between Peleos and Œnomaos for the possession of the land of Elis. In the center towers the colossal form of Zeus. He is slightly turned toward the right, as if thereby predicting the victory. Next to him stands the youthful heroform of Peleos, inclined a little sideways toward Hippodameia, who is trowing back her veil to look at her suitor. On the other side of Zeus is seen the defiant, gloomy form of Œnomaos next to his consort Sterope, whose attitude seems to imply a foreboding of their impending fate. This middle group is flanked by two quadrigas, with their charioteers kneeling or squatting, the lack of space condemning them to these positions. The corners are filled by the reclining rivergods Alpheios and Kladeos. Harsh, archaic, and rigid, arranged in a strictly architectural manner, this grand composition nevertheless conveys impressively the sensation of strained suspense before an impending storm. Combined with this we observe in the accessory figures, especially in those of the squatting boy and the old man sitting on the ground, a directness of spontaneous motive happily interpreted from life, while at the same time it was not granted to this art to lift such moments into the realm of the ideal.

The western pediment, which Pausanias ascribes to Alcamenes, represents the battle of Theseus with the Lapithæ and the Centaurs, who seek to carry off the bride Deidameia from her marriage festival with Peirithoos, prince of the Lapithæ (Fig. 153). It is a composition full of passion and vivacity which has not wholly overcome the limitations of space, yet still bears eloquent witness to the high endowment of Greek art for monumental creations architecturally restrained, but withal rising to a bolder flight. In the center we behold the colossal figure of Apollo, who in solemn tranquillity stands like a rock in the surging tide around him, extending his right arm with a commanding gesture, as if to protect the bride who, in spite of brave resistance, is hard pressed by the Centaur Eurytion. But already Peirithoos is drawing near with his ax to deal a death-blow to the monster. On the left side of the god, in a group of similar conception, a maiden is wrestling with a centaur, to whose destruction

Theseus is hastening with ax uplifted. Close by a boy is seized by another monster; and then follows a group in bold commotion, in which a maiden strives to break loose from the embrace of a centaur whose breast is transfixed by the broadsword of one of the Lapithæ. The two groups on the other side are quite similar, and each corner of the pediment is occupied by the reclining figures of a local nymph.*

This highly remarkable composition, which in its bold vivacity and the unfettered intertwining of the figures far surpasses what has been done in the pediments of Ægina, and even on the Parthenon, is yet archaically crude in execution. Notwithstanding some realistic elements, a decorative flatness of form is apparent, although a certain understanding of the human form, as to its frame and motion, may be recognized. The fact that the reverse of the figures is visibly neglected also gives evidence of a decorative conception in striking contrast to the strict all-round thoroughness of the Æginetan works, and yet more to those of the Parthenon. The treatment of the drapery is in both pediments quite inferior to the presentment of the nude parts, and is the chief cause of the unfavorable impression that these works produce. On the other hand, an expression of soulful sentiment which is lacking in the Æginetan sculptures is attained in the heads. It cannot be denied that the conception of the western pediment far surpasses its execution, nor that the conception and treatment of both pediments show the very same traits; whence the execution must be attributed to an inferior, and at the same time mechanically decorative provincial art. Far better in execution are the metopes in the pronaos and the epinaos, describing the twelve labors of Hercules. Two of them, the fight with the Cretan bull and the killing of the Stymphalian birds, had previously been found on the spot by the French government, and placed in the Louvre. The former, especially, is admirably composed, with its bold design of the two bodies placed diagonally; in the latter, the figure of Athene seated on a rock again shows defects in the treatment of the drapery. The best preserved among the others are the Hesperides, or Atlas, metope; then the Cleaning of the Augean stables, and the Taming of Cerberus. Throughout we find the same archaically crude yet powerful art, which produces telling effects also in the sculpture of the pediments, which are more homogeneous in style and more elaborate in treatment, showing in these respects a kinship to the Æginetan works.

Still more remarkable, perhaps, is a statue of Nikè found at the same place, which was dedicated by the Messeneans and Naupacteans

* G. Treu, in the *Jahrbuch des Kais. deutschen Inst.*, 1888, iii., gives another arrangement of the western group.

after 424 B.C. An inscription designates it as the work of the same Pæonius to whom the composition of the eastern pediment is attributed. Should this attribution be well founded, a complete revolution must have taken place in the master's art between that youthful production and this statue (Fig. 154). For here not only a boldness of composition, but also a picturesque freedom in the treatment of the drapery and of the human form is noticeable, which betrays a

Fig. 154. Nikè of Paeonios. (From Olympia.)

decidedly more recent art (as of about 420 B.C.), developed on the model of Phidias, and reveals Pæonius as an excellent plastic artist imbued with the tendencies of the younger Attic school.

In spite of all the records of the ancients, we should have only an indefinite idea of the height and perfection to which Attic art had attained at this glorious epoch, if, amid all the destruction that has taken place, a number of important sculptures belonging to the Athenian temples had not been preserved, by the discovery of which it becomes evident what was the nature of the Greek art of that period, and how it rises above all those splendid works of the sub-

sequent epochs, which fill the museums of Europe, and which in the eighteenth century were looked upon by our forefathers as the finest productions of the sculptor's art. If we bear in mind that all those works—beautiful and magnificent as they are—are yet always to be regarded, so far as their execution is concerned, as the productions of the workshop, we gain a faint idea of what must have been those won-

Fig. 155. Relief from Eleusis.

derful and irrecoverably lost creations in which the mind of the great master animated every stroke of the chisel.

In the first place, let us briefly mention the noble marble relief (Fig. 155) which was discovered at Eleusis some years ago, and was brought to the museum in Athens. It seems to represent Demeter with the torch, and Cora (Persephone) with the scepter, consecrating

a youth standing between them, who has scarcely passed beyond boyhood (Triptolemus, or Iacchus?). The noble style of the drapery, the solemn repose of the figures, and the beautiful distribution in the space allotted, give this work great artistic value. Similar in conception to the frieze of the Parthenon, it yet, in certain parts, betrays slight traces of archaic formalism; so that it belongs to the works which stand only on the threshold of the period of highest bloom. The coming splendor first greets us in the sculptures of the Temple of Theseus at Athens. The groups on the two pediments have been lost; but those of the eighteen metopes, which were ornamented with reliefs, are for the most part in a good state of preservation. We also possess the friezes from the two ends of the cella—those of the pronaos and the opisthodome. The metopes contain representations of the contests of Hercules and the deeds of Theseus, executed in strong relief, and exhibiting much passionate action, great truthful-

Fig. 156. From the Frieze of the Temple of Theseus.

ness to nature in the figures, and, at the same time, skillful adaptation to the space allotted. The friezes of the pronaos and opisthodome, executed in less strong relief, likewise represent contests. In that of the opisthodome (Fig. 156), the scene presented is the battle which Theseus with his Athenians and the Lapithæ fought against the Centaurs, who ventured, with presumptuous insolence, to interrupt the wedding feast of Peirithoos. In the frieze of the pronaos we also find contests going on in the presence of the gods, who are calmly looking on. Here, too, there is displayed the greatest energy of action in the representation of passionate contest, victory, and defeat. There is great boldness and freedom, and the composition is full of ideas and youthful freshness. Compared with the Æginetan groups, a complete victory is here exhibited over the severe constraint and symmetrical repetition of the works of the earlier time. Everything is more flowing, free, and varied; and the passion which so power-

fully affects the bodies is also given with life-like force in the energetic expression of the heads.

If, in so short a period, we see such progress made in the development of Hellenic sculpture, we shall not be surprised to find in the

Fig. 157. Female Figure from the Eastern Pediment of the Parthenon.

works of the Parthenon* a still higher, still purer, still riper advance. We know that Phidias, with his pupils and associates, called into life these plastic wonders; and we may even suppose the hand of the master in the composition of the whole, and in the design of all the essential parts. Unfortunately, after the terrible destruction of the

* Ad. Michaelis, "Der Parthenon, mit einen Bilderatlas"; Leipzig, 1871.

wonderful building by the Venetians in the year 1687, as mentioned above, only the two extremities of the building were left erect, no longer permitting a complete understanding of the connection between the parts, or a conception of the original motive of the whole; but enough is still existing for us to seize what was most important, and to enjoy its incomparable beauty. Only single figures are preserved of the groups of statues belonging to the two pediments; but, by a fortunate contingency, fifteen years previous to the destruction of the temple the French artist Carrey was in Athens, and his drawings of the groups on the pediment, at that time in a tolerable state of preservation, are in the library at Paris. From these, and from the

Fig. 158. Theseus, from the Eastern Pediment of the Parthenon, London.

accounts of the ancients, we can gain a complete idea of the original designs.

Both representations aim at the glorification of Athene. In the eastern pediment, over the entrance of the temple, her birth, or, more justly, the moment after birth, was depicted. In looking at the scene we must imagine ourselves upon Olympus. It was here for the first time that Athene is said to have appeared among the gods of Olympus. The whole central group has vanished; but the figures in the two angles are in a great measure preserved. They exhibit on one side Iris, who, as a heavenly messenger, is bringing the divinities of the land the joyful tidings of the birth of their mistress; while on the other side Nikè, opposite to her, advances toward Athene. On the right there are three figures: two sitting, and the third leaning on the bosom of the middle one; not, as was once believed, the daughters of Cecrops, Pandrosos, Aglauros, and Herse (Fig. 157), but probably Aphrodite on the bosom of Peitho, and another goddess, whose name

is not certainly known. On the left there are two corresponding figures, Demeter and her daughter Cora, near whom a magnificent youth is reclining, generally considered to be Theseus, but possibly Dionysus or Hercules (Fig. 158). While these remains are incomparably placed within the space allotted, the artist has also made admirable use of the extreme angles of the pediment. In the one we see Selenè plunging with her chariot into the sea; while in the other Helios is rising from the flood with his panting horses—a consolatory promise of the new and glorious day which is dawning upon the world with the birth of Athene. The greater part of all that is preserved of these figures was sent to England by Lord Elgin, and now forms

Fig. 159. Metope from the Parthenon.

the choicest of the treasures in the British Museum. Both the draped female figures and the naked body of the youthful hero exhibit a grandeur of conception, a nobility of action, and an harmonious beauty such as is unequaled by any other work in the whole range of art. The human body is conceived with the utmost truth, freedom, and beauty, but with a power and magnificence so exalted above all reality that it is illumined with the imperishable charm of divine ideality. The small remains of the western pediment are similar in character. In Carrey's time, as his drawings prove, it was in almost perfect preservation. It represented the disputes of Athene and Poseidon for the sovereignty of Attica, or rather the moment after the decision. The ruler of the sea thrust his trident into the rocky soil with his mighty hand, and a spring of salt water burst forth on the summit of the Acropolis; but Athene caused the sacred olive tree to shoot forth from the hard rock; and thus the dominion of the land was given to her, as having conferred the greater benefit upon it. The

artist has chosen for his composition the moment when the victorious goddess is entering her chariot, which stands at her side, amid the joyful acclamations of her waiting people; while the defeated god, striding away in fury, turns toward the other side, where his consort is awaiting him with her retinue. In the end angle the artist has placed the reposing form of a river-god—in one that of the Cephissus, in the other that of the Ilissus, with the water-nymph Callirrhoë to mark the Attic locality. The most important part preserved of

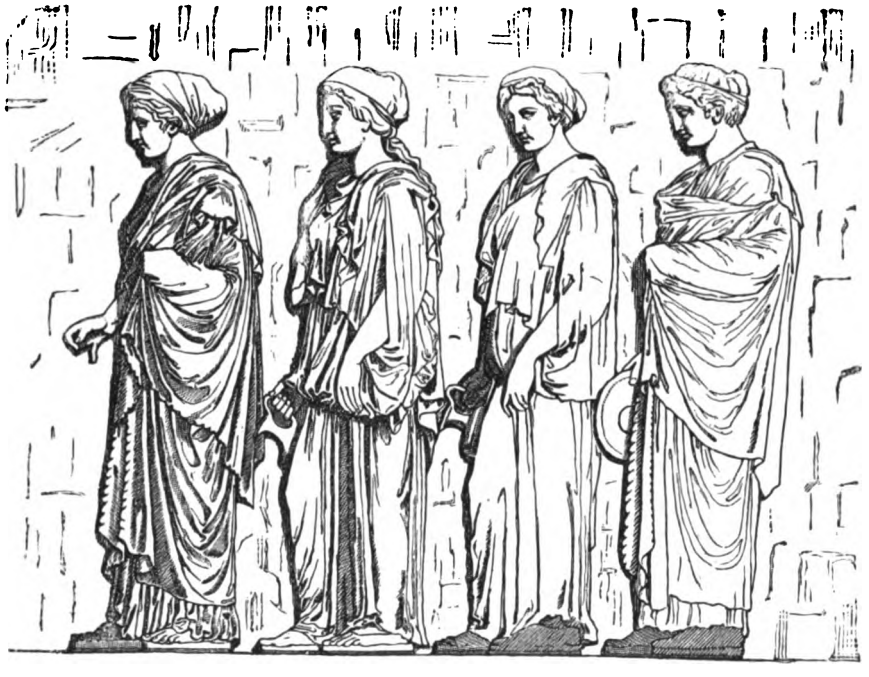


Fig. 160. From the Frieze of the Parthenon.

this group, with the exception of the bodies of the reclining river-gods, is the torso of Poseidon—a work which, in spite of its sad mutilation, brings before the eye, in every line, in every muscle, and in every vein, the mighty fury of the sea-convulsing god.

A second and very extensive series of works of art is formed by the reliefs of the metopes of the Parthenon, originally 92 in number, of which 31 are still in their places, one in the Louvre, 17 in the British Museum; and even this small remnant are for the most part in a sad state of destruction. We shall, therefore, never know what was the artistic motive which bound these metope sculptures together into one consistent whole. The metopes of the south side contain scenes from

the battle with the Centaurs, one of the favorite subjects of Attic art. Like those of the Temple of Theseus, they are in strong high relief, full of daring motives and passionate action; though this is for the most part softened by great beauty of form, and a masterly style of composition which knows how to adapt itself with the utmost freedom to the conditions of the space to be filled. Although the best of these works are worthy of the first master of his time (Fig. 159), yet we meet with others in which the composition is fettered, the space not well filled, and the figures clumsy and even stiff. We may

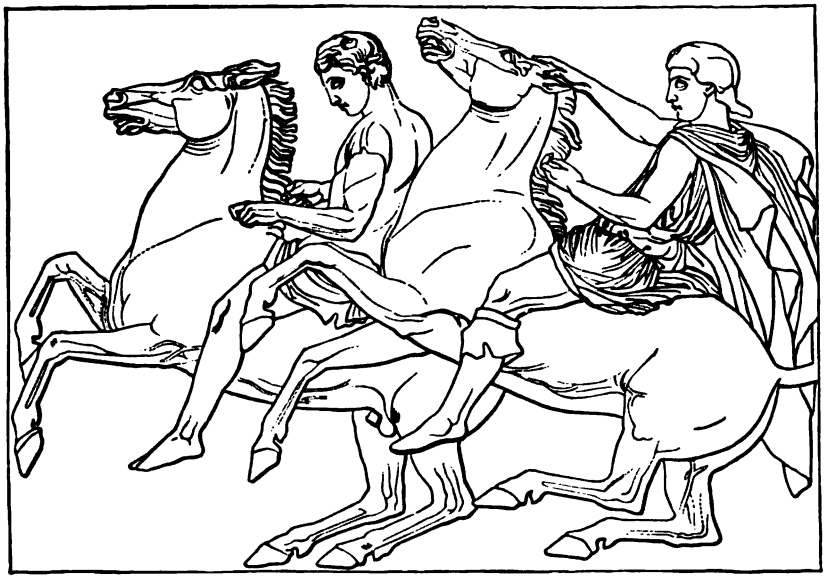


Fig. 161. From the Frieze of the Parthenon.

therefore suppose that, in carrying out this extensive series, considerable independence was allowed to the different artists engaged upon it.

In addition to all this profusion of sculpture, there was still the great frieze, which, in an unbroken line, surmounted the outer face of the wall of the cella, and which, in its length of 522 feet, more than 400 of which we still possess, presents one of the most extensive compositions of the kind in the world. In this procession—starting from the southwestern corner and seeming to proceed along the southern front, and also along the west and north fronts, until the two meet in the eastern end—all that was beautiful and excellent in Athens is seen united: the noble bloom of maidenhood, the fresh strength of youths trained in gymnastic exercise, and the solemn dignity of magis-

trates chosen by the people. A more beautiful opportunity for displaying grace and magnificence in diversified abundance could not have been offered to sculpture; but the task could not have been fulfilled in a more perfect manner than we have here before us in the work of this master. The manner in which the sculptor apprehended and executed this task, the unity of aim which lay at the foundation of all this rich life, are far removed from the dull realism with which the art of the present day would conceive such subjects, and which is echoed in the opinion of those who perceive in the frieze "nothing but the preliminary exercises of the separate choruses and divisions for the performance of the Attic pageants." This view has been

Fig. 162. From the Frieze of the Parthenon.

most strikingly contradicted by the artist himself, in the fact that he has represented on the east side, over the entrance, an assembly of enthroned gods, in whose presence the central or principal ceremony, perhaps the giving of the Panathenaic peplum, takes place. The head of the procession has just reached the temple. The group standing nearest to them, the archons and heralds, await, quietly conversing together, the end of the ceremony. They are followed on both sides by a train of Athenian maidens, singly or in groups, many of them with vases and other vessels in their hands (Fig. 160). The eye observes with heartfelt rapture the inexhaustible skill with which the same motive is varied in these simple figures. A charming contrast to these quiet groups is formed by the parts of the frieze on the south and north sides, where the sacrificial animals, splendid oxen and rams, are represented as sometimes quietly advancing, and sometimes vio-

lently struggling, with difficulty restrained by their leaders. Then follow men and women, then bearers of sacrificial gifts—bread in shallow baskets, and wine in vessels of various shapes; then flute-players and players upon the harp, followed by contestants in four-horse chariots. The rear is brought up by prancing horsemen, the prime of the manly youth of Athens, nobly and freely depicted in groups of infinite variety (Fig. 161). Lastly, on the west side, we find other youths just preparing for the procession, bridling their mettlesome steeds—restraining the prancing ones, and trying those that have been subdued by skillful horsemanship (Fig. 162). Thus the artist, with great wisdom, has combined the beginning, progress, and end of the procession in one well-considered composition; and, instead of a wearisome epic uniformity, he has given his work dramatic life, and has revealed in the figures of the gods the ideal motive of this festive pageantry.

Fig. 163. Caryatide from the Erectheum.

Never have the laws of relief representation been so delicately, so perfectly, so severely, and yet so freely developed as in this work. The figures rise only in slight relief from the surface; and yet they appear in perfect truth to nature. They present every grade, from solemn repose to ardent action; and yet there is a calm festivity, a breath of eternal cheerfulness and beauty, diffused over them. Lastly, in the execution of each, there is a care and tenderness such as only belong to the noblest creations of Attic art.

The sculptures that adorn the Erectheum, a building which was not completed till the close of the fifth century B.C., appear to be somewhat later in date than those of the Parthenon. Besides a frieze executed in Pentelican marble upon dark Eleusinian stone, the small fragments of which, still preserved, reveal a feebler style than that of the Parthenon works, we must mention the six Caryatidæ which support the roof of the side portico of the temple, which is designated after them (Fig. 163). They represent noble Attic maidens of faultless beauty, enveloped in softly flowing drapery, bearing on their heads the light entablature of the ceiling, like the Canephoræ of the Panathenaic procession. Youthful grace and free life are most successfully blended in them with the repose and severity demanded

by their architectural position. In better preservation are the friezes of the Temple of Nikè Apteros, which depict a contest between the Greeks and Persians in the presence of an assembly of the gods. Perfect in execution, rich and varied in composition, they breathe a passionate action which already indicates the transition to a period of art in which effect is more aimed at, and which finds its model in the frieze reliefs of the Temple of Theseus (Fig. 164).

In these works we cannot but perceive a contrast to the calm majesty of the art of the Phidian epoch; the independence of their motives reminds us, perhaps, of the tendency of the Myronic school. A small space outside the walls of this temple was enclosed by a low parapet covered with exquisite relief sculptures. Victories with wings

Fig. 164. From the Frieze of the Temple of Nikè Apteros.

are leading heifers to sacrifice, while others are arranging a trophy. Among the most distinguished of the successors of this able master we become acquainted with Cresilas, a copy of whose wounded Amazon is preserved in the Capitoline Museum; also with Callimachus, who occasionally went too far in the subtle elegance of his marble works, and was famous as the author of the Corinthian capital and as the designer of the beautiful candelabra in the Erectheum; lastly, Demetrius, who strayed so far beyond the boundaries of true Hellenic art that he devoted himself to a slavish imitation of nature, a soulless realism.

In opposition to the Athenian schools, Polycletus, a somewhat younger contemporary of Phidias, founded a second school of sculpture at Argos. Though likewise a pupil of Ageladas, his style developed itself in a totally different direction, so that he seems to keep the medium between Phidias and Myron. With the latter he as-

similated in his delicate conception and loving treatment of nature, and in a striving after the representation of the pure beauty of the human form. With the former he sympathized in the calm, cheerful repose of a nature contented in itself, which once elevated him even above the limits of his own mind into the region of the ideal. We are told that Polycletus' aspiration was to depict the perfect beauty of the human form in calm repose. Hence he selected almost exclusively

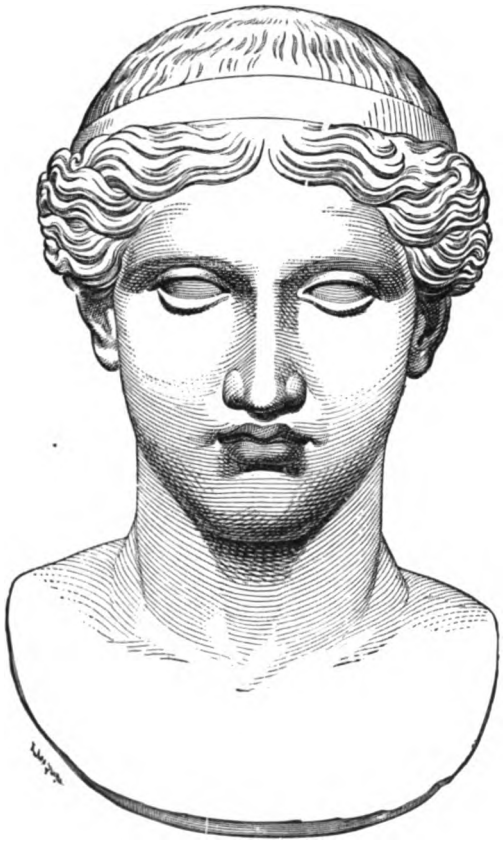


Fig. 165. Hera, formerly ascribed to Polycletus. Naples Museum.

the youthful figure, trained by gymnastic exercise, as the object of his art; and so great was his knowledge, so acute and clear his conceptions, that the name of "the Canon" was given to one of his most admired works, because in it the rules of normal youthful beauty seemed established once for all, while at the same time he explained them in a treatise upon the proportions of the human frame. Scarcely less famous was his Diadumenos, a beautiful youth, tying on his brow

the badge of a victor, a statue with the characteristic position and action of which we are acquainted from a statue in the Farnese Palace in Rome, one in the British Museum, and minor reproductions in other museums. He also executed an Apoxyomenos—an athlete cleansing himself with the strigil from the oil and dust of the arena—as well as five statues of Olympian victors. An Apoxyomenos was found in Rome about 1830, and is now in the Braccio Nuovo; but this is generally thought to be a copy of a statue by Lepippus, a later sculptor. Even the celebrated Amazon, in which he is said to have outrivaled Phidias and other masters, was a work of the character which necessarily inclines to the same style of art in its conception, which is that of a young woman of an almost masculine type. The character of these works of Polycletus is indicated in the saying of the

Fig. 166. From the Frieze of the Temple at Phigalia. British Museum.

ancients, that he was the first who represented statues resting on one foot while the other was slightly drawn back. By this means it was thought that the character of graceful lightness and easy poise might be rightly expressed.

If the genius of this master had hitherto been fettered both in subject and material—all these works having been executed in bronze—he produced in his later years a work which, in material, motive, and conception, rivaled the two colossal gold and ivory statues of Phidias. We refer to the statue of Hera for the temple of this goddess in Argos, which had been rebuilt after its destruction by fire in the year 423 B.C., and which is described quite fully, both temple and statue, by Pausanias. The statue represented her sitting on her golden throne, wholly veiled in golden drapery, with the exception of her face and beautiful arms, and on her head the diadem befitting the queen of the gods. The Horæ and Charites (the Hours and Graces) were represented in relief on the crown. In her right hand she held

the scepter, in her left the pomegranate, perhaps the token of her victory over Demeter. Various other symbolic emblems were added, and at her side stood her daughter Hebe, executed in gold and ivory by Naucydes, a pupil of the master. A bust in marble, the colossal head in the Villa Ludovisi in Rome, always called the Ludovisi Juno, was believed until lately to be a copy of this work, in which Polycletus established for all ages the artistic type of the royal consort of Zeus. The features are severe and strong; the brow, with its diadem crown, is free and open; and its height is gracefully tempered by the softly flowing hair. The grand look of the eye, the voluptuous and yet sharply chiseled lips, and the strong, rounded chin, proclaim the austere character of the supreme goddess. Lately, however, it has been rightly judged that in this work, with all its nobleness, there

Fig. 167. From the Frieze of the Temple at Phigalia. British Museum.

is betrayed a certain softness and mildness which cannot have been possible in the time of Polycletus. It is now believed, therefore, that in a marble head in the museum at Naples we have found an example of that greater strength which was to be looked for in a work of the old master of Argos (Fig. 165).

The pupils of Polycletus followed the style of art exhibited in his before-mentioned works. Among them, Naucydes stands foremost. He executed the Hebe for the statue of Hera, and was also known as the author of a disk-thrower and several statues of victors. There is a marble statue in the Vatican, found on the Appian Way in 1792, and this, which may be supposed to be a later repetition of his disk-thrower, from the quiet, thoughtful bearing previous to the throw, is characteristically distinguished from that of Myron. It also clearly shows the peculiarity of Polycletus' art in the light elasticity of the attitude. Lately, however, it has been argued, not without prob-

ability, that this very thoughtfulness, and the delicacy of the conception, point rather to a work of Attic art.

The other parts of Greece at this period stand out less prominently, compared with the schools of Argos and Attica; yet there is no lack of remains, which, in all probability, may be traced to these two schools of art. The most important are the reliefs decorating the interior frieze of the Temple of Apollo at Bassæ, near Phigalia in Arcadia, which were discovered in the year 1812, and are now preserved in the British Museum. The temple, which was built at the beginning of the Peloponnesian war, was the work of Ictinus. His sculptures exhibit, however, such a thoroughly different style, that they are scarcely to be traced to Attic hands, although the subject refers to the favorite national legends of Attica. Amazon contests

Fig. 168. From the Frieze of the Temple at Phigalia. British Museum.

(Figs. 166, 167, 168) and the battle with the Centaurs form the subject of the whole frieze. The combatants are separated by Apollo hastening forward with his sister Diana in a chariot drawn by stags. Among all that is preserved to us of the productions of Greek art, these reliefs must be singled out as the boldest and the most animated compositions. A vigor, combined with power and exuberance of invention, prevails in them, far superior to the kindred works in the Temples of Theseus and Nikè, and never needing the aid of repetition. At the same time, the figures are handled in a masterly manner. Many of the groups are enchantingly beautiful: all of them are strikingly truthful. But the delicate moderation, which never allowed Attic art to outstep the limits of the beautiful, is often lacking with the Phigalian artist. Exaggerated, overviolent, uncouth, and even ugly traits are introduced; and one can almost trace in them the violent passions which mark the Peloponnesian war, with its fatal results

for Greece—passions and feelings as much in contrast with the noble and pure enthusiasm of the period of Marathon as the Phigaleian sculptures differ from the works of the art of Phidias.

The Third Epoch,

which includes the fourth century until the time of Alexander the Great, differs unmistakably from that preceding it, both in its political events and in its character. The Peloponnesian war had destroyed all the friendly mutual relations of the Grecian States; had kindled into enmity against one another those passions which could no longer be united in opposition to a common foe; and had introduced a more animated age, and one of more varied motives, in the place of the great days gone by. The old great conceptions and sentiments had passed away, and in their stead appeared new thoughts and feelings, successfully set free from the bondage of the past; for, as the old bond of union between the individual states dissolved, each individual subject attained a freer position amid the more untrammeled action of the whole, developing a complete strength more freely, and making a more varied use of the rich resources at command. The intense tragedy of Euripides, the philosophic systems of Plato, and, later, of Aristotle, are distinctly the offspring of this epoch; and if the spirited comedy of Aristophanes turned its biting wit in favor of the great past, and against the characteristics of the new era, it is none the less a product of the latter. In sculpture, decided changes were the result of these conditions. The intenser, more emotional character of the time must, of necessity, be reflected in its works. Where the earlier age had pictured impressive and awe-inspiring deities, now appeared in their stead the divinities of a more spirited, a warmer, and more life-loving activity; where hitherto, in the representation of animated action, only the play of the bodily powers had been used in the portrayal of victory or defeat, it now became the highest goal of art to show the deeper pathos of the soul, the intense expression of emotion. It was a result of this that the material, too, was changed; that marble, reproducing most admirably the softer, finer shades of form and of expression, was preferred to bronze; and that work in gold and ivory, for which the resources of the states no longer sufficed, and which had belonged rather to an earlier, traditional, and decorative epoch than to the modern age of ardent study of pure form, was almost utterly neglected. In general, this epoch was not favorable to the great monumental works; commissions from private citizens, and consequently the influences of a more decided

individual taste, determined, for the most part, the art character of the time.

One master, however, shows the period of transition to this more emotional method—a man who still largely represented the conceptions of the earlier period. This was the old Cephisodotus of Athens, presumably the father of Praxiteles, who thus united the influence of Phidias with that of the younger school. He devoted himself especially to statues of the gods, both in bronze and marble; and was perhaps the first to establish an artistic type for the nine Muses. It has recently been asserted with probability that the exquisite marble statue in the Glyptothek at Munich, previously called by Winkelmann the Leukothea, is a copy of one of his works: the goddess of peace (Eirene), holding upon her arm the infant Plutus, the god of riches (Fig. 169). The work still breathes the noble style of the time of Phidias, but unites with it a certain depth of feeling in which we may distinctly recognize the influence of the later epoch.

Fig. 169. Eirene, After Cephisodotus. Glyptothek, Munich.

The first great master of this period is Scopas. A native of the Island of Paros, he was one of the two leaders of the new Attic school in the first half and toward the middle of the fourth century B.C.; the other being Praxiteles, who was somewhat his junior. He is named as successful above all others in reproducing touching pathos and stormy passion with a power that had as yet been undreamed of. One of the most important monumental works undertaken in this epoch belongs to the earlier part of his life—the restoration, under his direction, of the Temple of Athena Alea in Tegea, which had been burned in the year 394 B.C. The two groups in its pediments, representing the hunt of the Calydonian boar and the combat of Achilles with Telephus, were also from his hand. If this fact indi-

cates an early developed and versatile genius in the artist, his later works certainly confirm the inference. Among the great number of his statues of divinities, those were thought especially noticeable which exhibit a strong and elevated feeling. Among them was an Apollo—brought to the Palatine at Rome by Augustus—clothed in a long, flowing robe, striking the cithara in exalted mood, his head crowned with a wreath of laurel. The marble statue in the Vatican, called the Apollo Musagetes or Apollo Citharoedus, appears to be a copy of this forcible creation of the master, but the statue is much restored. The expression of excited enthusiasm was still more powerfully exhibited in a maddened Bacchante. The type of this statue may perhaps be found in a statuette in Florence (see the outline drawing in Perry's "Greek and Roman Sculpture"). Less powerful, but so much the more delicate in conception, was a seated Ares, who, consumed with love for Aphrodite, appears sunk in revery. Scopas was the first to model the goddess of love herself in the full beauty of her naked body, the loveliness of which compelled a burst of admiration. More important than these works, however, was a marble group of large dimensions, which, though set up in a temple at Rome, was originally, perhaps, intended for the decoration of the pediment of a temple, and represented the goddess Thetis bringing to her son Achilles the armor made for him by Hephæstus. In the Nereids and Tritons riding their sea-monsters, and in the numerous following of sea gods and goddesses, the artist admirably pictures the rollicking existence of the merry ocean-folk. Finally, we know that Scopas, with other artists, was employed about the year 350 B.C. in the decoration of the mausoleum at Halicarnassus. Of the considerable remains of the works at Halicarnassus we speak later on. Not a great deal, on the other hand, has come down to us of the sculptures on the temple of Athena at Tega*; to wit, the head of a boar, and two youthful male heads—the one looking up with an expression of grief, and both characterized by the far, protruding frontal bones, large, deepset eyes, and vigorous chins. Similar forms with the same energetic touch of life-likeness are apparent in the youthful Hercules, frequently repeated (for instance, in Rome, Palace of the Custodians and Palazzo Corsini); a Meleager likewise occuring repeatedly (Vatican and Villa Medici); an ideal head of an athlete at Olympia, and a female head from the southern slope of the Acropolis, in the museum at Athens. In all these works the vigorous art of Scopas is easily traceable.†

The second leader of the Attic school, Praxiteles, seems to have

* Illustrations in Brunn, "Denkmäler Antiker Plastik."
† Cf. B. Graef, in "Roemische Mittheil. des Inst.," iv., p. 189 *et seq.*

been born in Athens about the beginning of the century, in the neighborhood of the year 392 B.C. Nearly allied to Scopas in his tendencies, he appears to be distinguished from him by greater versatility and an extraordinarily productive fancy. About fifty different works by him are mentioned, among them several groups of many figures each; and if Scopas, almost without exception, made use of marble, Praxiteles, though he also gave this material the preference, executed many excellent works in bronze. In reviewing his creations, we find the greatest variety among them. Gods and men, male and female figures, youth and age, were within his power of representation; but he inclined especially to the softness and delicacy of feminine and youthful forms. Though he portrayed all twelve of the Olympic gods, as in the Temple of Artemis at Megara—and especially Hera, Athene, Demeter, and Poseidon—Aphrodite and Eros were nevertheless, his favorites; and to other divinities — to Apollo and Dionysus, for example—he gave a youthful figure, the better to satisfy his tendency toward tender grace. Though we cannot doubt, from what we learn of his bronze group of the Rape of Proserpine, his Mænads, and bacchanal Sileni, that he was capable of representing scenes of excited passion, yet the quiet of a soft and dreamy mood exalted into a gentle enthusiasm was the real atmosphere of his art.

Fig. 170. The Faun of Praxiteles.

Among his celebrated works the Cnidian Aphrodite stands first, as one of the most famous art creations of antiquity. The old authors are filled with its fame; and they relate that the Bithynian king, Nicomedes, offered the Cnidians the payment of their whole state debt in exchange for this wonderful work. The artist had represented the goddess entirely nude, but he modified this bold innovation by making her left hand about to take up a garment, as though she had just emerged from the bath, while with her right she modestly

shielded her person. However numerous may be the copies of this famous statue that have come down to us, of which probably the best is that in the Vatican, to which has been added metal drapery, they can, at best, only convey to us the outward characteristics of its attitude, not the exquisite purity of the work of Praxiteles himself.

Four other statues of the same goddess by Praxiteles were known to the ancients, especially a draped one at Cos, which the Coans preferred to that of Cnidos. Hardly less celebrated were his representations of Eros, among which the marble statue at Thespia was most highly prized. The god was represented in the period of transition between boyhood and young manhood; and it is possible that a torso, among the works preserved in the Vatican, may give us, in its delicate, youthful body and the almost pathetic dreamy expression of the slightly drooping head, an idea of this creation of Praxiteles. A third important work represented Apollo as the lizard-killer (Souroktonos); a bronze statue, of which several copies in marble and bronze have been preserved. The animated, youthful figure, leaning against a tree, and watching, with an uplifted arrow in the right hand, for the little animal as it runs up the trunk, hardly conveys in its graceful play the element of divinity. Finally, among the figures which belong to the class of Bacchic subjects, the most celebrated was that of a young faun, placed in a temple in the Street of Tripods in Athens, which Pausanias calls "The Famous" (Periboëtos). Numerous marble statues of a young and beautiful faun—who, with his right arm resting upon a tree-trunk, leans upon it in pleasant, careless mood, with a half-dreamy look—seem rather to be modeled after another faun by Praxiteles, which was set up at Megara (Fig. 170). There is no doubt that the soft, harmonious charm of all this master's works is aided by a peculiar, delicately softened method of handling, full of tender grace, which brought out in its highest perfection the glow and the translucent polish of the Greek marble. This is seen in the original statue of Praxiteles, exactly as described by Pausanias, unearthed by the latest excavations in the Temple of Hera at Olympia,* the Hermes holding upon his arm the boyish

Fig. 171. From the Parapet of the Temple of Nikè Apteros.

*G. Treu, "Hermes," Berlin, 1878; also "Ausgrabungen von Olympia," iv.

Dionysus, said by Pausanias to be the work of Praxiteles. Well preserved except the extremities of the legs and arms, the slender, youthful form and the gentle, almost dreamy attitude betray the artistic character which was foreshadowed in the Goddess of Peace of Kephisodotos, and here ventures one step farther into the realm of loveliness and grace. Combined with this are a perfection of finish, a softness and delicacy, especially in the treatment of the nude, and a breadth of such vital originality, that the work must be designated as one of the most delightful among the original crea-

Fig. 172. Head of Niobe. Uffizi, Florence.

tions of Greek sculpture which have come down to us. Also the exquisite youthful head of Eubuleus (so denominated by Benndorf), found at Eleusis, now in the museum at Athens, may be looked upon as an original work of this master.

Among the works of the Attic school of this period which have come down to us, the most important are the bass-reliefs on the parapet of the Temple of Nikè Apteros at Athens, of which there is mention above. On one fragment are seen two female figures, holding with vigorous action a struggling bull destined for the sacrifice; on the other, is a female figure in a long, flowing garment, repre-

sented with an admirable expression of the very instant of action, as adjusting the sandal of her right foot (Fig. 171). Besides these, the bas-reliefs which decorate the frieze of the choragic monument of Lysikrates, also named above, are full of animation, and not without a certain humor. They represent, in varied, charming, and spirited groups, the revenge of Bacchus upon the Tyrrhenian pirates.

Another work of this class, famous even in ancient times, is especially noteworthy, though it has come down to us only in later and sometimes only mediocre copies—the group of Niobe and her children. The original, brought from Asia Minor, was in the Temple of Apollo Sosianus at Rome; originally, it probably ornamented the

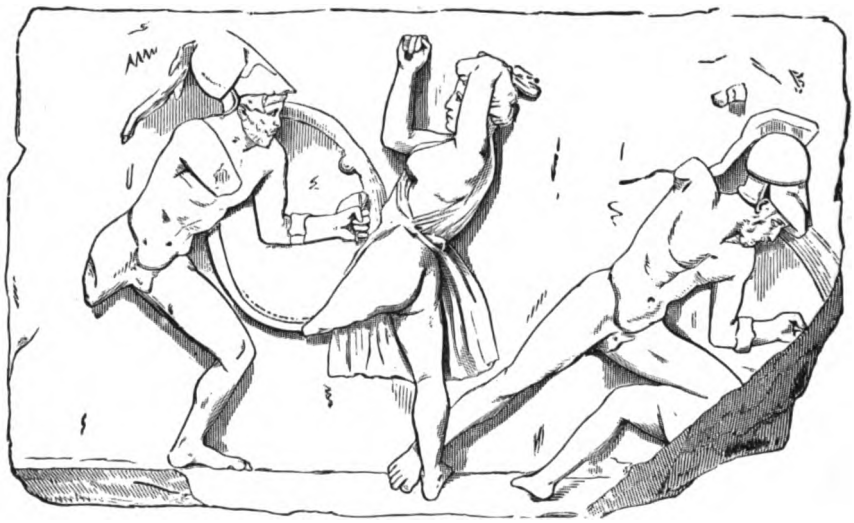


Fig. 173. From the Mausoleum at Halicarnassus.

pediment of some temple of Apollo in the Asiatic peninsula. Even the ancients were doubtful whether it was by Scopas or Praxiteles; and though, as far as we can judge, the weight of probability is in favor of the former, no certainty can ever be reached in the matter. The subject is, as is well known, the vengeance of Apollo and Artemis upon the Theban queen Niobe, who had boasted, because of her fourteen children, of her superiority over Leda, who had but two. This rashness was punished by the destruction of all of Niobe's children. The figures of the mother with the youngest daughter, the children's tutor with the youngest son, and six other sons and three daughters, have been preserved from a later copy of the original group; the principal figures, with that of the mother, being in the Uffizi Palace at Florence. There are, besides, in the Pinakothek at Munich, the prostrate figure of a dead Niobide, and the torso of the figure called

Ilioneus. It cannot be certainly ascertained whether the latter also belonged to the Niobe group; but it so excels the other figures in beauty, that it must in any case be reckoned one of the rarest original works of that flourishing period of art. The vengeance of the merciless divinities has just begun. One son already lies stretched in death; the others, already struck or in immediate danger, fly to their mother for protection. One of them, in his flight, seeks to raise a sister sinking at his feet; another, fatally wounded, raises himself for a last defiant look toward heaven. The mother forms the central point of the whole group.

Finally, there also belong to Asia Minor a series of bas-reliefs which were discovered in Budrun (the ancient Halicarnassus), and which, almost beyond a doubt, come from the famous mausoleum which Queen Artemisia of Caria built to the memory of her husband in 353 B.C., its sculptured ornamentation executed by Scopas, Leochares, Timotheus, and Bryaxis.* Several bas-reliefs of a frieze, with animated contests with Amazons, were carried at an early day to Genoa, and came into the possession of the Marchese di Negro; the other remains are in London, in the British Museum. Though unequal in their execution, these works so distinctly breathe the living spirit of Scopas' art, that it cannot be denied that they formed part of the mausoleum (Fig. 173). Besides these reliefs from the frieze, fragments of lions, horsemen, and of the great marble *quadriga* with the statue of Mausolus which crowned the whole, have been discovered. The latter, almost completely restored, deserves notice as a most unique original portrait of that epoch.

The wealth in works of Greek art which Asia Minor then possessed has been once more demonstrated by the investigations of Benndorf in Lycia, where a sepulchral monument discovered by Schoenborn at Gjölbashi, about the middle of the nineteenth century, has been examined more closely. Its plastic decoration consisted of a series of friezes, which have been transferred to the Imperial Museums in Vienna; these, measuring about 330 feet in length, are among the most extensive of that period. They acquire still greater interest through their subjects. Besides the frequently treated battle between the Centaurs and Amazons, there is shown the League of the Seven against Thebes, and then a whole series of scenes describing, with a profusion of interesting detail, a contest which is probably the siege and taking of Troy. Especially noteworthy, however, is the Slaying of the Suitors, from the "Odyssey," represented in a series of splendid scenes (Fig. 174) revealing the spiritedness and refinement of Attic art.

*See C. T. Newton, "A History of Discoveries at Halicarnassus"; London,

In contrast to the art of the Attic school, the character of which must even now be called an ideal one, the art of the Peloponnesus remained, during this epoch, true to its older and more realistic tendencies. At the head of the Argive-Sicyonian school stands Lysippus, whose activity extended far into the time of Alexander the Great. He was not only one of the most influential, but also one of the most productive, artists of antiquity; though the assertion that he produced fifteen hundred works is beyond doubt exaggerated. Working only in bronze, he was even in this respect opposed to the Attic school; and technically, too, he adopted the earlier style of the Peloponnesus. Though several statues of divinities are mentioned among his numerous works—as, for instance, the colossal Zeus at Tarentum (sixty feet high), and the colossal figure of Hercules set up at the same place —his art, nevertheless, inclined too strongly to the representation of the material — of the beautiful, well-developed human figure as a subject in itself—to permit him to excel in the domain of the ideal. It is equally characteristic of this tendency, that of all ideal figures his most frequent and most favorite subject was the representation of manly physical strength — Hercules; it was he, indeed, who first really and fully defined the hero's typical figure, and set forth his exploits in bronze groups. This master was, however, most fertile in portrait statues; among which his

Fig. 174. From the Reliefs at Gjölbashi. (Zeitschrift für bildende Kunst.)

numerous statues of Alexander were so admirable, that the great king desired that Lysippus only should thus portray him. In these productions, the most delicate individuality seems to have been successfully combined with a conception which approached the heroic. Compositions of more extended design also belonged to this class; such as a bronze group dedicated in Delphi, which represented Alexander hunting a lion rescued by Craterus; such, also, as the colossal monument representing the king in the battle on the Granicus, with twenty-five horsemen and nine foot-soldiers. In all these works, the vivacity and the minute and faithful execution were much praised; a quality that was especially observable in the treatment of the hair. It was, however, on the whole, the beauty and harmony of the human body, especially of the male body, to which the efforts of Lysippus were directed; and we may remark, that, though he carefully kept in mind the proportions established by Polycletus, he nevertheless remodeled them upon a new plan, and one better calculated for effect: he formed the body more delicately, slightly, and elegantly, and made the head smaller in proportion to the trunk, than usual in nature. In this regard, his Apoxyomenos—an athlete cleansing himself with the strigil from the dust of the Palæstra—was especially admired in Rome. A masterly statue, perhaps a copy of it in marble, found in 1846 in Trastavere, and now an ornament of the Vatican Gallery (Fig. 175), shows clearly the fine elasticity and agile litheness of a young, beautiful, and perfectly developed body. If we add that Lysippus also reproduced admirably, and with perfect faithfulness to life, the figures of animals, we shall have fairly indicated the sphere of his activity.

Fig. 175. The Apoxyomenos, After Lysippus. (Vatican.)

Many able pupils adopted his methods, who devoted themselves with peculiar lightness and delicacy to similar representations of youthful life. But the Attic school also extended its influence, in this

epoch, over other branches of artistic effort; and portraiture especially seems to have come more into vogue, in the sense of faithful, but by no means absurdly realistic, representation of the subject. Statesmen, orators, philosophers, poets, poetesses, [redacted]etæræ—for Praxiteles not only portrayed his beloved Phryne, but was allowed to set up her statue beside one of Aphrodite—are often and a[redacted]bly reproduced in sculpture. To convey an idea of the noble conceptions of Greek portrait statues, we give a drawing of the marble statue of Sophocles, in the Lateran Museum, Rome (Fig. 176). This may well be a copy of the famous bronze set up in 368 B.C. The Æschines of the Naples Museum is an interesting companion to it. Besides these, the two seated statues of the comic poets Menander and Poseidippus, in the Vatican, deserve mention, as also the pathetic and powerful Euripides, the rough Demosthenes, and the crafty Phocion, in the same collection; further, the noteworthy figures of the serious Pindar and the fiery Anacreon in the Villa Borghese, and the Aristotle of the Spada Palace, and especially the noble head of Homer, several times repeated, but most noticeable in the Capitoline Museum and in Naples; and, finally, the delicately individualized Æsop of the Villa Albani.

Fig. 176. The Statue of Sophocles. (Lateran Museum.)

Specific manifestations of the high artistic sense of this period are the reliefs on Greek memorials, many of which were already in the public and private collections of Europe,* when recent systematic excavations at Athens laid bare an entire cemetery, in front of the Dipylon.† As on the monument of Aristion, so also we often meet

* The Imperial Academy of Sciences in Vienna has prepared a comprehensive publication of all known Greek tomb reliefs of importance.

† Carl Curtius, "Der attische Friedhof vor dem Dipylon," in "Archælog. Zei-

here with only the simple presentment of the deceased; as, for instance, that of Aristonautes as a steel-clad warrior; that of Dexileos, who was killed in 394 B.C. in the Corinthian War, and with whose memorial the series of these tombs, as it seems, begins. Occasionally it is a family scene, as on the monument of Agathon, or on the noble tombstone of Hegeso, which represents the mistress seated with a jewel-case brought to her by a handmaid. Tinged with gentle sad-

Fig. 177. Attic Tomb Relief. Museum, Athens.

ness are the parting scenes, as on the fine monument of Demetria and Pamphile (Fig. 177). Because these works did not always come from the hands of renowned artists, but must be looked upon as products of a rather workmanlike activity, they attest anew the depth and vigor of Attic art. Their style corresponds to the soft and elegant plastic art, still limited in its mode of expression, which characterizes the younger Attic school of the fourth century B.C.

tung," vol. xxix., 1872. Cf. Salinas, "Monumenti sepolcrali scoperti presso della chiesa della S. Trinita"; Turin, 1863.

The Fourth Epoch,

following these two periods of highest vig[illegible] comprises the time after the death of Alexander, and terminates [illegible] the conquest of Greece by the Romans. The rule of Alexander had br[illegible]en up the varied and individual life of the Greek races; but, as some co[illegible]pensation for this, it had spread the influence of the Hellenic spirit far beyond the boundaries of Greece, till it extended deep into the Orient. What it thus gained in extent it lost in concentration, purity, and independence. As it spread over the East, it absorbed in a great degree the influences of the region, and paid for this in the gradual loss of its own peculiar energy. The destiny of the art of sculpture was changed by this circumstance. In the sundered and dismembered republics of Greece there was now hardly any place for it, and the new-formed courts of princes became its refuge. Instead of constituting the glory of a free people, it fell into the service of rulers whose luxury and pomp necessarily gave it a tendency toward brilliant modeling, mere outward effect, and methods characterized by mere skillful workmanship. Yet, in spite of this, Greek sculpture still retained such vitality that it could add yet others to the domains of art it had already thoroughly conquered, and could create works which were long universally looked upon as its chief productions. The chief characteristic of these is an almost morbidly heightened passion, expressed in a certain audacity of method, and a kind of composition which tended very strongly toward the picturesque. Rhodes was the chief of the Greek states, and Pergamos the only one of the new courts, where the art of this period attained to any important strength.

The school of Rhodes is shown to be a continuation of the Peloponnesian by the fact that we find at its head Chares, a pupil of Lysippus. The bronze colossus of the sun-god, 105 Roman feet in height, which was overthrown by an earthquake soon after its completion, was his chief work, and the largest statue of ancient times. We can understand how great the taste for colossal statues, and the liking for effective treatment in their execution, must have been, from the assertion that, besides this, a hundred others were erected on the Island of Rhodes. The same spirit is manifested in a different way in the statue of "Athamas repenting his frenzy," a work of Aristonidas, in which it is said by Pliny that iron was mixed with the bronze in order to give the appearance of a blush of shame. The most famous work of the Rhodian school is the group of the Laocoon, executed by Agesandros, Athenodorus, and Polydorus, and discovered in 1506 at Rome. It is one of the most admired of the chief treasures of the

Group of Laocoön and his sons, found in the ruins of the Thermæ of Caracalla in 1506 *and now in the Vatican Museum. It is considered as belonging to what is called the Rhodian school of Greek sculpture, which flourished after the death of Alexander the Great and until the complete conquest of Greek lands by the Roman Empire.*

LAOCOÖN

FROM THE STATUE IN THE VATICAN MUSEUM, ROME

Vatican collection (Fig. 178). Pliny tells us that this group stood in the palace of Titus; and, from an obscure expression in this passage, it has been concluded (wrongly, as we think) that it was originally made to be placed in that palace. Laocoon was, as related in the "Æneid," a priest of Apollo, and, because he had blasphemed against the god, was destroyed at the altar with his two sons, by two serpents sent by the deity, as he was about to offer a sacrifice to Neptune. This terrible incident, in its full detail, is represented with wonderful art; and a closely connected and interdependent group is formed from the three separate scenes, admirably

Fig. 178. Group of the Laocoon. Vatican Museum.

worked to a climax, and setting forth with incomparable power a moment of the most fearful suffering and horror. The two serpents have just wound themselves about the three figures. Laocoon, powerless, is pressed against the altar, at the foot of which the younger son is breathing out his life with a last sigh, under the serpent's cruel bite. The father cannot help him, for he is himself struck in the side by the deadly fang of the second serpent, so that he thrusts himself upward, convulsed by a spasm of pain, and twists his strongly dilated breast toward the right. Overcome with the agony of death, his head thrown backward, he utters a shriek of anguish; while his right hand, with an expression terribly true to nature, grasps

the back of his head, and the left, with a convulsive, instinctive clutch, seeks to tear off the monster. The elder son, at his left, gazes up in horror at his father, while he vainly seeks with his hand to free his upraised left foot from the coils of the serpent, to whose rage he, too, is in a moment to fall a victim. All this is compressed into one moment—turned into stone with fearful faithfulness. The whole pathos is concentrated in the powerful figure of the father. The whole treatment strengthens, by its almost exaggeratedly sharp, effective manner, the expression of perfect horror; but we see in it nothing but purely physical suffering. The impression is a merely morbid one; for no moral idea, no tragic conflict, no indication of fault or sin, is presented to us. And herein lie the limitations of this work—its contrast to the Niobe and other productions of the earlier period. Still, both its composition and execution are, and will remain, masterly and admirable.

Of precisely the same character, conceived in the same spirit, and executed with no less artistic skill, is another work belonging to the same epoch and school, the most colossal group of ancient times—the group called the Farnese Bull, by Apollonius and Tauriscus of Tralles. According to Pliny's assertion, it belonged to Asinius Pollio at Rome; it was discovered in the sixteenth century, in the Baths of Caracalla, and is now in the Naples Museum. It is described by Pliny, and the extensive restorations were carried out in attempted conformity to the description. The whole upper part of Dirke's body, and her arms; the head of Amphion, and his arms and legs—although the hands and feet are ancient; the head and both arms of Antiope; the head, both arms, and one leg of Zethus, and the legs of the bull, which, of course, determine the position of his body, are all restorations. It is evident, therefore, that the existing group is of no value as a document in the history of ancient sculpture. It appears, however, that this work suffers from the same deficiency as the Laocoon: here, also, the expression of a moral idea is wanting, and our sympathy is awakened only through bodily action and suffering; but in boldness of composition this is perhaps even greater than the other.

The second great school of this epoch, that of Pergamus, seems to have distinguished itself especially in the representation of the battles of Attalus and Eumenes against the Gauls, whose swarming hordes, at about this period (240 B.C.), were overrunning Asia Minor. Pliny mentions several artists who were engaged upon these works—Isigonus, Phyromachus, Stratonicus, and Antigonus. King Attalus caused four groups of statues to be set up on the Acropolis at Athens, in memory of his great victory over the barbarians; representing, be-

sides his own successful battle with the Gauls, the triumph of the gods over the Titans, Theseus' conquest of the Amazons, and the victory of the Athenians over the Persians at Marathon. Following what had been from ancient times a favorite custom with the Greeks, he thus sought to find in history, myth, and legend, parallels for his own recent achievement. The base—50 feet long and 16 feet wide—upon which this great monument rested was found not long ago near the southern wall of the Acropolis; and a still more important discovery was that of a number of single figures, now scattered through different museums, which clearly formed a part of the memorial of Attalus. Four of them are in the Naples Museum, three in the Palace of the Doges at Venice, one in the Louvre, one in the Vatican,

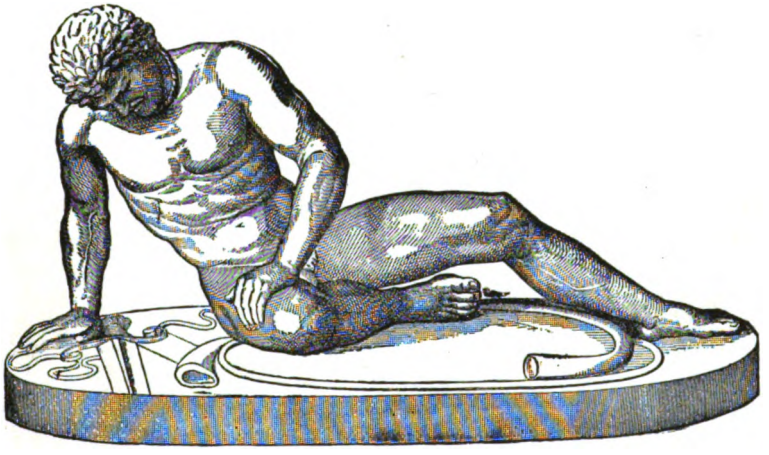


Fig. 179. The Dying Gladiator. (Rome, Capitoline Museum.)

and a tenth in the possession of Castellani, the Roman jeweler. Those at Venice are the most interesting, for in them the Gauls are represented with their ethnographic characteristics indicated with special exactness. In all probability, similar memorials of the victory over the Gauls were also erected in the city of Pergamus. We know nothing of their arrangement; but their character and importance are clearly displayed in the statue of the Dying Gladiator in the Capitoline Museum (Fig. 179). This is undoubtedly a Gaul, who, seeing the foe approach in overwhelming force, has fallen upon his own sword to escape a shameful slavery. Overcome by the faintness of approaching death, he has fallen upon his shield; his right arm with difficulty prevents his sinking to the ground; his life ebbs rapidly away with the blood streaming from the deep wound beneath his breast; his broad head droops heavily forward; the mists of death

already cloud his eyes; his brows are knit with pain; his lips are parted in a last sigh. There is perhaps no other statue in which the bitter necessity of death is expressed with such terrible truth—all the more terrible because this hardy body is so full of strength—because the impression conveyed is so little softened by anything ideal, or by any harmonious beauty in the figure; for the character of the barbarian, as contrasted with the refined and cultured Greek, is worked out most carefully in the treatment of the body, in the rough and even callous texture of the skin, the rugged outlines of the frame, the bristling hair, and the distinct race-type indicated by the head. What a gulf there is between those Persian representations of the time of Mara-

Fig. 180. Zeus Group. From the Frieze of the Battle of the Titans on the Altar at Pergamus. (Berlin.)
(From the illustration in "Jahrbuch der Köngl. Preussischen Kunstsammlungen.")

thon, with their complete idealization, and the sharply individualized, thoroughly historic accuracy of this statue of the Gaul!

Closely related to this, in character, material, and execution, is the marble group of a Gaul putting his wife and then himself to death, which is in the Villa Ludovisi at Rome, and is known as "Arria and Pætus." It is the same scene, only represented at another moment, and made more touching by a higher pathos, and by the expression of the very instant of suffering. The Gaul has just given his wife her death-blow, and she is falling lifeless at his feet, only her left arm still supported by his hand. The defiant warrior himself, his right hand raised high above him, plunges his short battle-sword with one strong blow into his breast, in such stormy haste as though to snatch the last

moment from the close-approaching foe. This work is equal to the other in sharp individuality, and in the accurate rendering of the figure.

The grandest creation which the school of Pergamus has bequeathed to us, however, is the altar of Zeus, probably erected under Eumenes II., which was adorned by one of the most imposing plastic compositions of classical antiquity. The structure was a great platform with vertical retaining walls and an upper and lighter columnar building surrounding the actual altar of sacrifice. This superstructure is not well understood, but the outer walls of the platform are crowned by a frieze in relief, 8 feet high and 400 feet long, representing the Battle of the Titans. Once more the ideal presentation of form, peculiar to Greek art, is here revived to combine with a pathetic expression, a boldness and power in the description of passionate emotions, remindful of Laocoon and of the Dying Gladiator. In characterizing the Titans, most of which terminate in serpents, while some are supplied with wings or exhibit still other fantastic combinations, the artist has made use of elements which call to mind the most archaic Oriental myth-phantasms. The two principal groups are that of Zeus hurling his thunderbolts against three of the Titans (Fig. 180), and that of Athene before whom the mournful Gæa, mother of the Titans, rises wailing from beneath the ground (Fig. 181). The three-headed Hecate, and most of the other gods, can be traced in the fragments, now preserved in the Berlin Museum. As regards inspired power of invention and passionate ardor, overwhelming variety of forms and ideal beauty of the individual figure, this frieze ranks with the most important masterpieces of Greek sculpture. A smaller frieze, of picturesque freedom in composition, containing heroic legends of Pergamus—especially that of Telephos, the mythical ancestor of the Attalidæ—seems to have had its place on the columnar building which stood upon the great platform. This frieze was about five feet in height.*

Of the time between the decline of the Pergamene school (about 150 B.C.) and the establishment of the Roman Empire under Augustus are several works of sculpture of the utmost importance historically, because having for two or three centuries engaged the attention of modern Europe, which took them for the finest possible works of ancient art. The masters of the Renaissance knew nothing of the pure Greek work which is described above, and took those statues and groups which now form the contents of the great museums of Europe for the ideally perfect art of the Greeks of the

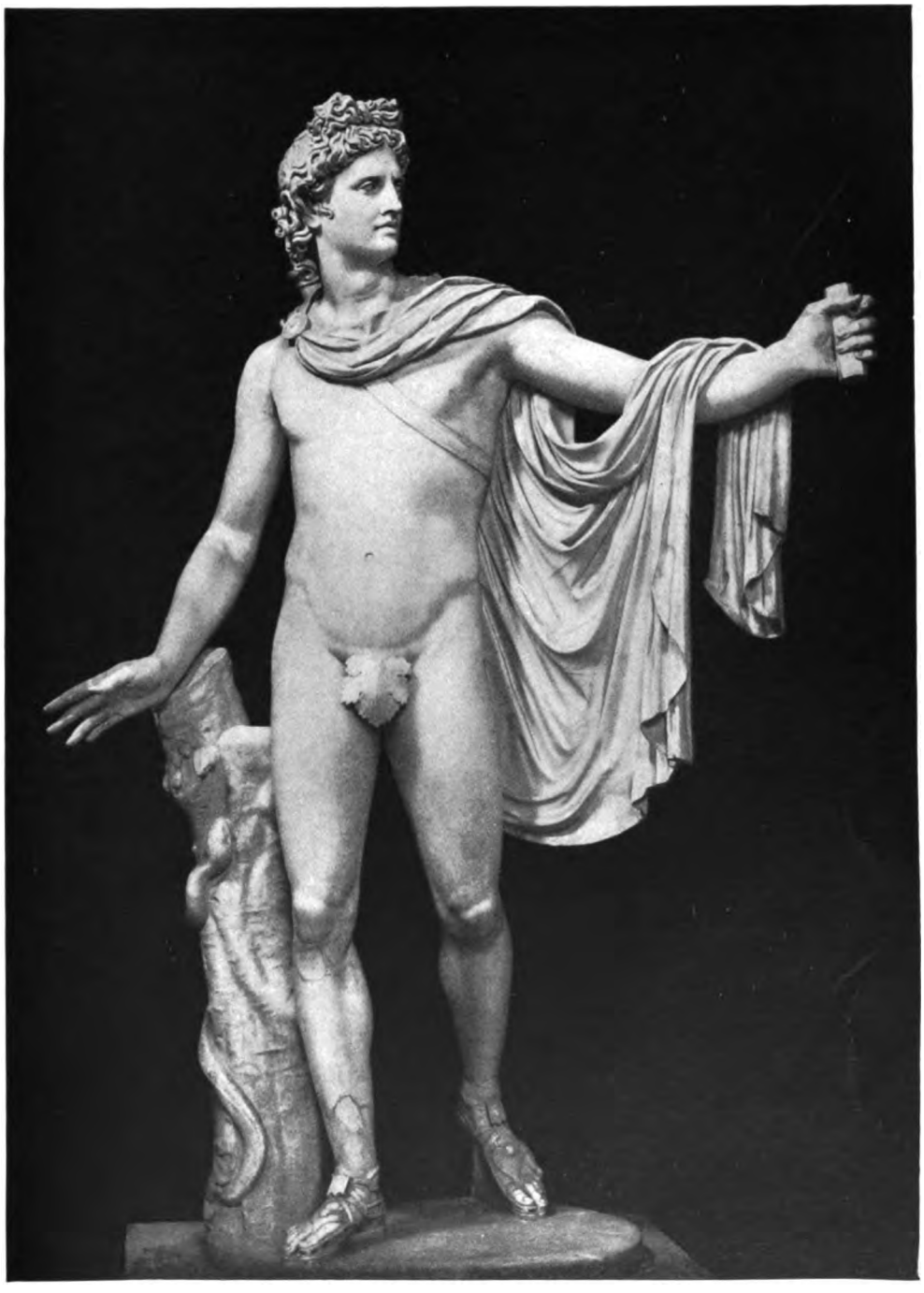
* Cf. the official report of the excavations, reprinted separately from "Jahrbuch der K. preuss. Kunstsammlungen"; Berlin, 1881.

Great Time. Such a statue is the Venus of the Medici, for so many years the central figure in the Tribune of the Uffizi Museum at Florence. This piece may be taken as a later modification of the Cnidian Venus described above. There are in the Naples Museum a row of similar statues, and others exist in many of the museums. They all affect the same attitude and the same general treatment, the Medicean Venus being only the most finely worked specimen that has come down to us of this once very popular type. Another example is the Hercules Farnese in the Naples Museum; although this piece is in its general design thought to be of the earlier and better time of Scopas.

Fig. 181. Athena Group. From the Frieze of the Battle of the Titans on the Altar at Pergamus. Berlin.
(From the illustration in "Jahrbuch der Köngl. Preussischen Kunstsammlungen.")

The existing statue, not much restored, in its extreme exaggeration of modeling, in the evident desire of the sculptor to express in human muscles all the divine strength of the demigod, is tasteless and in every way foreign to the Greek spirit. There are, however, better things than this. Of familiar statues there are the Venus of Capua, whose attitude suggests a possible restoration for the Venus of Melos; and the admirable Diana of Versailles in the Louvre Museum, one of the most effectively draped female statues left us by antiquity. Of male statues, one of the finest is the so-called Borghese Gladiator in the Louvre Museum, in reality the statue of a contestant in a race of men carrying the heavy shield and spear; found

Apollo of the Belvedere, an antique statue in the Vatican at Rome. It belongs to the later school of Greek art, commonly called the Rhodian School, as explained in the description of the plate of the Laocoön. When first discovered in Antium in the sixteenth century it was restored by the sculptor Montorsoli, who replaced the left hand with what it holds and also the fingers of the right hand; so that there has never been any certainty as to the action of the god. It has been thought that instead of a bow, as Montorsoli supposed, that he held an Aegis, as in the case of the very similar Apollo, the bronze statuette at St. Petersburg.



APOLLO BELVEDERE

IN THE BELVEDERE OF THE VATICAN

at Antium in the seventeenth century. Among these also is to be placed the wonderful Torso of the Belvedere, a piece of the most perfect technical skill and showing the profoundest knowledge. It is unfortunately much broken away, but the perfect modeling of the muscles of the chest and sides expresses the attitude so that the original action of the figure can hardly be misunderstood. It is of this statue that we hear in connection with Michelangelo's studies, and his love for it in his old age and partial blindness.

Among these later specimens of sculpture is one of the most famous works of all antiquity, the explanation of which was long sought in vain, and only recently discovered by a fortunate accident. This is the Apollo Belvedere of the Vatican; or, perhaps the original, which was the prototype of this and other imitations. The god is represented stepping lightly forward; his beautiful, manly body naked, save for the light chlamys which falls from his left shoulder over the arm with which it was formerly supposed that he held his bow. The head, turned a little toward the side, is raised in an attitude full of spirit; the eye seems to follow the effect of the arrow that has just left the string; and an alert, vigorous life animates the proudly parted lips, and breathes from the dilated nostrils. It is thus that one might picture the god of light at the moment when he had launched the fatal shaft against the Python, and his whole godlike beauty was still thrilling with the noble wrath that filled his soul. There is something wonderfully striking, bold, and full of action in the impression that the work produces; and however much the rhythmic harmony of the form, the exquisite curve of the outlines, and the nobility of the whole structure of the body, may speak of the immortal beauty of the god, the observer is nevertheless most delighted by the animated aspect of the head, the fiery life of the proud features. Schnaase, writing forty years ago, calls the Apollo the most brilliant piece of sculpture of ancient times; and its excellences, as well as its limitations and the purely subjective character of its conception, are fitly characterized by this phrase. It cannot be denied that the effort of the artist to give the effect of the moment of action is carried so far as to produce something startling and striking; and, although the somewhat theatrical impression which the statue makes may be brought about by the badly restored hands and their peculiar spread-out position, a tendency in that direction is observable even without this damaging addition. The Apollo was discovered in Porte d'Anzo (the ancient Antium), a favorite resort of the earlier Cæsars. Without being led by this fact to assign the statue definitely to their day, we may find reasons enough in the whole character of the work to attribute it to that epoch. That it is, however, only the copy of a

Greek original, has only been proved by the discovery of other imitations, which may be traced back to the same work. The most important of these is a bronze statuette belonging to Count Sergei Stroganoff at St. Petersburg, and discovered at Paramythia, near Janina, in 1792.* It gives precisely the same position and action of the god, but shows that, instead of holding a bow in the broken and falsely restored left hand, he held the ægis with the head of Medusa, which he was extending toward some enemy. Homer makes him thus put to flight the Achaians with the ægis intrusted to him by Zeus. Sophocles, in the "Œdipus Tyrannus," represents him thus opposing Ares, the bringer of the pestilence. But the key to a complete explanation of the statue was found, in this case also, in the conflicts with the Gauls—in the invasion of Greece by the Gauls under Brennus in 280 B.C., which had for its chief motive the pillage of the temple at Delphi. The Ætolians and their allies hurled their armies against the enemy, and defeated them overwhelmingly. But a pious legend had it, that Apollo himself came to the aid of his defenders with tempest, hail, thunder, and lightning, and that his shining form put the panic-stricken foe to hasty flight. To commemorate the victory, a festival celebrating the rescue was appointed; and the Ætolians, and their allies the Patræans, erected statues to the god. Both the Stroganoff Apollo and the Belvedere are undoubtedly traceable to one of these works; and so, too, is the beautiful marble head which has passed from the hands of the sculptor Steinhäuser into the possession of the Basle Museum. We owe our admiration to that vigor of Greek genius which, even at this late period, could create a work of such a high ideal type.

The marble statue of the Aphrodite of Melos, commonly called The Venus of Milo, belongs to this period. It is a full-length figure larger than life, now in the Louvre. Grandly serious, and almost severe, the goddess of love appears, not yet conceived, as in later representations, as a love-demanding woman. The simple drapery resting on the hips displays uncovered the grand form of the upper half of the body, which, with all its beauty, has that mysterious unapproachableness which is the genuine expression of the divine.

The work must date from the second century B.C. In its majesty and its impressive earnestness it may be looked upon as a conception of earlier times, illustrating the type of the pre-Praxitelean Aphrodite; but the treatment of the surfaces, and especially of the drapery, mark it as belonging to the Hellenistic age, and as nearly contem-

* For a full account of this bronze, see Apollon Boëdromios, "Bronze statue im besitz des Grafen Sergei Stroganoff, erläutert von Ludolf Stephani"; St. Petersburg, 1860. With four copper-plate illustrations.

porary with the Artemis of Versailles and the Victory of Samothrace. Whether or not she held in her left hand an apple; or a shield serving as a mirror; or a shield upon which she was writing, and was therefore rather a Victory (Nikè) than an Aphrodite, must remain a matter of conjecture; but that she stood independently is altogether probable. An association with Ares in a group, as has been suggested, is not supported by any evidence, and can only be considered as a remote possibility.

As one of the most splendid works of this epoch must finally be mentioned the Nikè of Samothrace, which was placed in the Louvre in 1863. Of a size almost twice that of life, this badly mutilated marble figure represents the goddess of victory dashing forward in dauntless onset and sounding the trumpet, while in her left hand she is carrying the implements for the erection of a tropæum. Thus she is represented on the coins of Demetrios Polyorketes, and we may conclude with a good deal of certainty that this imposing work was produced to commemorate the victory at Cyprus, in 306 B.C., over the fleet of Ptolemy. The curious pedestal, representing the prow of a Greek galley, also seems to point to a naval victory. Unlike the Nikè of Pæonius, who is in the act of flying, the goddess is conceived as hastening onward with rapid strides. The spirited freedom of her movements, the superb roundness of her form, the effective treatment of the drapery pressed by the wind tightly against the body, and floating backward in mighty waves—all this lends to this glorious figure the stamp of peerless perfection. Its lofty, pathetic character is in thorough keeping with the artistic tendency of this epoch.

Among the precious creations of these times must finally be reckoned the marble sarcophagi of Macedonian rulers which were discovered in Phœnicia, in a large tomb of many chambers, on the site of the ancient Sidon, and are now in the museum at Constantinople. Rich, plastic adornment and decoration in color combine here to produce a brilliant effect.

C.—COINS AND ENGRAVED GEMS.

The life of the Greeks was so thoroughly penetrated with the breath of art, that it sought to impress the stamp of beauty even upon all its practical needs. This is especially evident in Greek coins, though these displayed a greater variety and perfection in Græcia Magna and Sicily than in Greece itself. Athens, Argos, and Sicyon, the capitals of art during the most flourishing periods, long preserved a very plain and antique style in the devices on their coins. In the most remote antiquity a rough form of bullion was in use, until the

custom of coining money was brought from Asia: first from Lydia to the Greeks of Asia Minor, and thence to those of the European continent. King Pheidon of Argos is said to have directed the minting of the first coins, in Ægina, in the eighth century, or, according to some authorities, not until the seventh. The oldest Greek coins of which we have any knowledge consist of thick, bean-shaped pieces of silver, bearing on their obverse the roughly executed symbol of their city, and on the reverse nothing but the quadrangular impression (*quadratum incusum*) which the molten piece had received from the

Fig. 182. Examples of Greek Coins.

stamp. In lower Italy and Sicily, on the other hand, thin, round disks of silver were in use, upon which the figure was so stamped that it generally showed on the reverse an indented repetition of the obverse. Such coins are called *nummi incusi,* or incuse pieces. In the fourth century B.C. a higher development appears in the coins of the Pheneus and Stymphalos in Arcadia, and in those of the Islands of Naxos and Crete. In Magna Græcia and Sicily, however, the art of coinage was of considerable importance as early as the fifth century B.C.; and in the next hundred years it attained a high stage of development in the spirited character of the work executed, in its variety and perfection of form. It is a peculiarity of all Greek coins that they commonly bear the image of the special local divinity, or some emblem belonging to him. It is only with the period of Alexander and his succes-

sors that the heads of rulers begin to take the place of these figures of the gods. In Fig. 182 we give some examples from different periods of Greek coinage. To the earliest and simplest, only decorated with an emblem, belong (*a*) one from Ægina, with the tortoise; (*b*) one from Ephesus, with the bee; (*c*) a Bœotian coin, with a shield; (*d*) a coin attributed to Athens, with the antique mask of Medusa; (*e*) one of Athens, with the sharply drawn head of Pallas and the bird dedicated to her. A freer development, showing itself in lifelike composition, purer drawing, and the filling of the space at command without crowding it, is displayed in (*f*) the coin of Selinus, with Apollo and Artemis in their chariot—reverse, the river-god Selinus at the altar of Asclepius; in (*g*) that of Heracleia, with a noble head of Pallas, and Hercules strangling the Nemæan lion; in (*h*) that of Pandosia; (*k*) that of Platanæ, with its beautiful head of Hera; and (*i*) that of Tarentum, with a kneeling satyr, and the mythical Taras, riding on a dolphin. Finally, an idea of coins of the last Greek epoch may be formed from *l*, with the head of Alexander, and *m*, bearing the head of Antiochus VII. (Euergetes), and a representation of Athene, similar to that statue which, according to the description, was set up in the Parthenon by Phidias. The importance of coins to the student of ancient art is in their being the unaltered, uncopied, original Greek sculpture of the time to which each belongs. The large statues of the galleries are, nearly always, copies made to adorn Roman courts and gardens; but the gold or silver or copper medal is a piece of original work.

The numerous carved gems that have come down to us show a still great and varied wealth of artistic talent; and these also are sometimes of pure Greek work, though the distinction is hard to make. In this department, work of the earlier epochs is comparatively rare; and it is only in the later, more luxurious period that we find a multitude of the most delicate productions—brilliant conceptions illustrating the most interesting passages of myth and legend. In the fourth century B.C., Pyrgoteles was considered the most famous master of gem-engraving; he was the only one who, according to the legends, was permitted by Alexander to engrave his portrait. Under Alexander's successors, in the gorgeous courts of the Orient, such luxury was developed in this branch of art that gems and intaglios no longer satisfied it, and the so-called cameos were invented—stones cut in high relief. In these, different stones with layers of different colors were the favorite material, their natural formation being used with such skill as to bring out a light carving against a dark background. The largest and most beautiful of these works is the Cameo-Gonzaga in the imperial collection in St. Petersburg, which is supposed to rep-

resent the heads of Ptolemy I. and his wife Eurydice. A cameo of almost equal size, in the imperial collection at Vienna, bears the portraits of Ptolemy II. and his queen.*

4. *Greek Painting.*

A.—ITS CHARACTER AND INFLUENCE.

Among the Greeks, the development of the art of painting was later than that of sculpture. In its higher departments it was the younger, but not, on that account, the less important art.†

Although in modern times doubts have often been cast upon the great æsthetic work of Greek painting, yet the enthusiastic descriptions of the ancient authors, and their universal agreement as to the general high estimation in which works in this branch of art were held, should guard us against adopting unfavorable judgments.

It is, indeed, difficult to follow the descriptions of the ancients, and next to impossible to gather even an approximate idea of those much-praised works of art, inasmuch as not a single one of them has been preserved, and we should be literally obliged to judge of their color as a blind man might. Notwithstanding this, a great number of paintings have come down to us, which, when their position is carefully considered in relation to ancient art-production as a whole, give us the means for an approximate estimate.

These are, on the one hand, the innumerable painted vases that are to be met with by the thousand in all European museums; on the other, the rich treasures of wall painting which have been discovered at Pompeii and some other places. But we must remember that all these works are either, like the vases, the product of skilled hand labor, or else they are, like the wall pictures, showy decorative works, and presuppose, therefore, an incalculable inferiority in all respects to the creations of the great Greek masters. If, then, the paintings on the vases give, to say the least, evidence of an inexhaustible wealth of artistic motive, of an amazing strength of picturesque fancy, of great skill in arrangement and composition; if, moreover, the better ones among them display an inimitable delicacy of drawing, an exquisite rhythm of lines—this alone should be sufficient to convince us of the artistic importance of that multitude of pictures of which these

* See C. W. King, "Antique Gems and Rings"; 2 vols., London, 1872. Millin, "Introduction à l'Etude des Pierres Gravées"; Paris, 1796. Köhler, "Geschnittene Steine"; St. Petersburg, 1851. J. H. Middleton, "The Engraved Gems of Classical Times." Barclay V. Head, "Historia Numorum, A Manual of Greek Numismatics." G. F. Hill, "A Handbook of Greek and Roman Coins." Percy Gardner, "The Types of Greek Coins."

† See H. Brunn, "History of Greek Artists"; Stuttgart, 1859.

are but weak copies. It is true that there is expressed in these works rather a plastic than a picturesque power. In a single color, and with an equally monochromatic background, they do not rise above the level of reliefs; and even fail to produce the effect of reliefs, because of their flatness and lack of changing play of light and shade. The case is different with the wall paintings which have come down to us from antiquity. Although, from a technical standpoint, they are not superior in character to simple works of decoration, they give us a surprising retrospect of the moving, whole-souled beauty of the masterpieces which have been lost forever. A full, warm, rich vividness of color, a delicate marking of forms by means of light and shade, and a studied chiaroscuro, are here the artistic principles on which these representations rest. They are evidently the work of men trained in a great school, and there could have been no such school without masterpieces of art far superior to the journeymen's work found on house walls in Pompeii. For those are purely decorative, without attempt at expressional value, and also without pretensions to representative merit of a high order. They are flat, simple, and uniform, without complexity, without elaborate composition, generally without background or much attempt to harmonize near and distant objects. They are more nearly related to those laws which govern bas-reliefs than to free artistic development, and prove still further that the plastic principle is unmistakably stamped upon every production of Greek art.

The technique of ancient art varies with the character and purpose of different works. The chief distinction was, of course, between wall painting and painting upon tablets. The former were generally executed upon carefully prepared and delicately smoothed stucco, with ordinary water colors, the vehicle, that is the glutinous or adhesive medium, of which is not ascertained. The latter was upon wooden tablets, in *tempera*—that is, in colors mixed with a kind of sizing. Encaustic painting—a method in which colors mixed with wax are applied to a carefully prepared surface, and then fixed by the near approach to the surface of hot irons, fusing the wax—was probably in use from early times to fix securely the painting upon external walls and sculpture set up out of doors; but when it was first used for elaborate wall paintings we have absolutely no means of deciding. Color decoration by other methods than painting was less practiced among the Greeks than among other nations of antiquity; but mosaic work, consisting of figures formed of various colored stones joined together, was used for inferior purposes, especially for the more magnificent ornamentation of pavements. The splendid later development of mosaic belongs to the Roman period.

B.—HISTORICAL DEVELOPMENT.

The accounts of the ancients concerning the first discoveries which brought painting into being do not deal with mythical, but with definite historical names. Thus Cleanthes is said to have made the first silhouettes, and Telephanes to have further developed the art of linear drawing; Ecphantus to have first introduced painting in a single color (monochrome); Eumarus of Athens to have been the first to distinguish man from woman by means of different colors. Here, however, it must be pointed out that no ancient writer has left us any thorough study of the history of painting; all our information comes from slight and casual allusions, embodying, as seen in the last sentence above, legendary accounts of early times. In the most ancient designs upon pottery vases we find some evidence of the condition of painting at the time of their production; and the lighter tint of the women and the darker complexion of the men show us in what consisted the service said to have been rendered to art by Eumarus. Soon after these first efforts and discoveries, a master appeared, whose celebrated works shed luster on the age of Cimon. Polygnotus, a native of the Island of Thasos, seems to have been summoned to Athens by Cimon, about 462 B.C., for the purpose of adorning a number of the more beautiful edifices with paintings. Among other things, he, together with several fellow-artists, painted, in a hall to which the name of "Poikile" (the many-colored) was given, the battles of the Athenians with the Lacedæmonians, that of Theseus with the Amazons, the capture of Troy, and the battle of Marathon. He and another Athenian master named Micon represented in the Temple of the Dioscuri (Castor and Pollux) a series of episodes taken from the heroic legend. He also contributed to the paintings in the Temple of Theseus, to the Pinacotheca of the Propylæa, and to the vestibule of the Temple of Athene at Platea. But his paintings in the Lesche, at Delphi (a hall founded by the Cnidians), enjoyed the greatest fame. He here represented the taking of Troy, and the visit of Odysseus to Hades, in pictures rich in figures, and in multitudinous groups crowding one upon another. These pictures are described as not possessing a full roundness of modeling; we may imagine them to be very flat and strongly outlined, not wholly unlike vase paintings, light upon a dark background, without shading and modeling, done with four colors only, and entirely without perspective. And yet, with all this strict simplicity in the treatment, the delicacy of drawing, the wealth of expression in the figures, and the nobility of the forms were greatly praised. When, moreover, the

eyebrows of his Cassandra are lauded; when it is said of his Polyxena that the whole Trojan War could be seen in that virgin's eyelids; when, especially, individuality ("Ethos") is attributed to Polygnotus before all others—we cannot but be convinced of the force and intellectual importance of his works.

Thus we see painting in this epoch applied to great commemorative objects, held rigidly and simply to the representation of historical events, and devoting itself to whatever in them is spiritual and provocative of thought. But they are wanting in that more developed, more realistic character which aims rather to attain whatsoever is imposing, inspiring, awe-awakening, than that which is attractive and varied. In its bald severity of treatment it appears to bear some relation to the works of Christian art in the first part of the middle ages; but in the knowledge and skill shown in the execution, in the accuracy of drawing, in the delicate distinctness of its forms, and in the delineation of various states of feeling, it undoubtedly far surpassed them.

After this, painting passed through a further development of a technical character. The Attic school continued its efforts in this direction through the remainder of the fifth century B.C. Attempts at illusory effect, at bringing perspective into play, are said to have appeared in Agatharchus, who was employed in the decoration of theaters and in similar matters. But more important was the work of Apollodorus, who is stated to have been the first to introduce a more picturesque arrangement and a more effective modeling of his figures by observing the effect of light and shade, and who acquired in this manner the name of "the painter of shadows."

After the Peloponnesian War, the art of painting deserted Attica for a time, only to make a far greater advance in the cities of Asia Minor, and especially in Ephesus. The merit of this Ionic school lies principally in a richer and more refined development of color, in a more finished modeling, and in the attainment of a more positive illusory effect. During this period, painting, like sculpture, began to concern itself more with ordinary life, and the fulfillment of secular and private aims; and painting upon panels began gradually to take the place of fresco painting. Many anecdotes of the artists of this epoch give evidence of their efforts for the accurate imitation of nature; as, for instance, the well-known story of the wager between the two chief masters of this school, Zeuxis and Parrhasius, the former of whom painted some grapes which the birds pecked at, while the latter, by painting a curtain hanging over his picture, succeeded in deceiving even his rival himself. The very prominence given to such stories is evidence of the slight sense of the true value and char-

acter of the art of painting possessed by the writers who thought it worth while to record them. In antiquity it was clearly held unworthy of a scholar and a man of literary attainments to give attention to technical details of what he looked upon as a mere mechanical trade.

Zeuxis of Heraclea, probably a native of Græcia Magna, displayed great activity at Ephesus during the later years of his life. Not only were delicate attractiveness and womanly grace to be found in his pictures—as, for instance, in that of Helen, for which the inhabitants of Croton allowed him to make use of the most beautiful and most noble virgins of the city as models—but he also succeeded most admirably in giving a lifelike expression to situations full of vivacity and meaning; as in the case of his picture of a centaur family, which is so well described by Lucian. We have another illustration of this in the report that he died of laughing over a picture of an old woman that he had painted. In rivalry with him, Parrhasius the Ephesian developed a style of art which was not less admired. According to the account of Pliny, he was the first to apply the law of proportion to painting, lending refinements of expression to the face, elegance to the hair, a winning charm to the mouth, and, as the artists themselves admitted, bearing off the palm for his outline drawings. A delicacy of form, a keen observation of light, shade, and reflection, and a masterly embodiment of psychological expression, seem to have been his chief characteristics. This last trait is very plainly to be observed in the stories of the ancients concerning a picture in which he embodied all the contradictory qualities belonging to the character of the Athenian people. In another picture he painted two boys, in whom were exhibited all the confidence and frankness of boyhood. Among his scenes from the lives of heroes there are several, such as the assumed insanity of Ulysses and the one known as the suffering Philoctetes, which indicate, in the choice of their subjects, the tendency toward the delineation of strong emotion.

Timanthes, who did not indeed belong to the Ionic school, but who once took part in a competition with Parrhasius at Samos, is to be counted among the more celebrated contemporaries of these two masters. He is especially praised for the power of his imagination, as well as for the depth and significance of his intellectual conceptions. His picture of the sacrifice of Iphigenia was much admired; in this his masterly skill intensified the expression of pity and grief, and touchingly conveyed the supreme anguish of the father, Agamemnon, by depicting him with veiled head. It is thought that a copy of this work is preserved in one of the Pompeian frescos, differing somewhat, to be sure, in its details, and poorly executed.

The same contrast that exists between the sculpture of the Attic school and that of the Peloponnesian may be thought to have existed also between the painting of the Ionic and the school of Sicyon. A more scientific training, more strongly defined, characteristic drawing, with deep, effective coloring, appear to be its distinctive features. At its head stood Eupompus, known by his painting of a conqueror at the Olympic games. His pupil, Pamphilus, seems to have laid the foundation of a more thorough school of painting by the introduction of scientific studies, and appears to have been a teacher who was eagerly sought after. Melanthius is praised for the composition of his pictures; and Pausias for his skill in foreshortening and in the

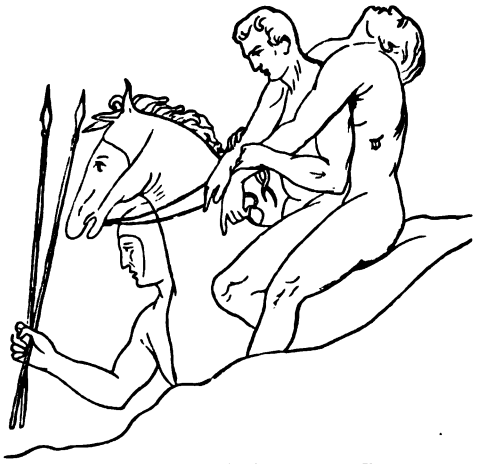


Fig. 183. Wall-Painting from Pæstum.

painting of walls and roofs, as well as for the particularly delicate execution of his encaustic work.

Apelles, who lived in the latter half of the fourth century, and who knew how to combine the excellences of the Ionic and Sicyonian schools, is stated to have brought Greek painting to its highest perfection. He seems to have lent to his works a finished charm, and that delicate spirit of beauty which can arise only from a combination of exquisitely yielding forms with a subtle fusion of tints, and a noble, full-souled conception. The irresistible charm of his works consisted in the harmony of their proportions. The most celebrated among them was the Aphrodite rising from the sea, and wringing the water from her hair with her hands. Painted originally for the Temple of Æsculapius at Cos, it was brought to Rome and placed in the Temple of Cæsar by Augustus, who allowed the people of Cos, as indemnity for it, a reduction of one hundred talents in their tribute.

Afterward, when the picture had suffered some damage, no artist dared to undertake its restoration. Another of his pictures was a representation of Calumny. Besides this, he painted the gods and heroes, and innumerable portraits of Alexander, who would never consent to be painted by any one but Apelles. He also painted for the Temple of Artemis at Ephesus the great king, holding the lightning in his hand; and so impressive was the expression of this picture, that Alexander said in regard to it, that there were two Alexanders—the unconquered son of Philip, and the inimitable one of Apelles.

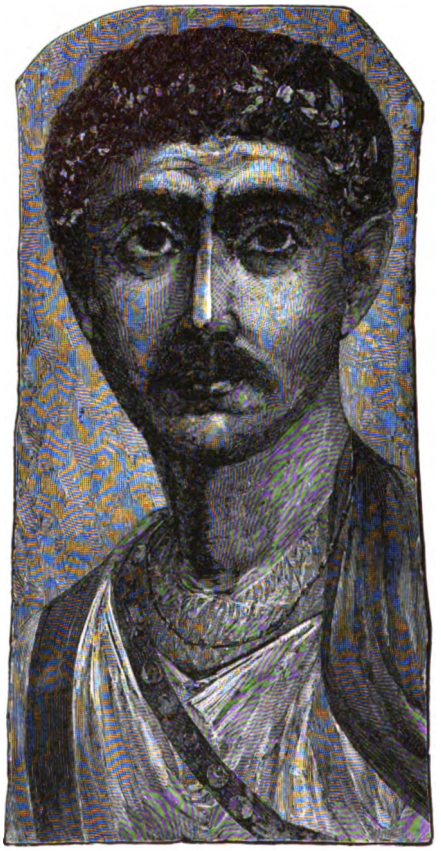


Fig. 184. Male Portrait from Fayoum.

Among the contemporaries of Apelles, Protogenes was so admirable that even Apelles himself stood gazing upon a picture of Ialysus painted by him, as if petrified with admiration.

Aetion, whose picture of Alexander and Roxana was highly praised, was also an excellent painter. Antiphilus, too, enjoyed great celebrity, although he showed a preference and great aptitude for a somewhat coarser, lower order of painting; namely, for caricature, effects of light, and scenes of every-day life. Theon was another artist of the time, who was distinguished for the effective way in which he represented such incidents as were characterized by life and movement.

A few relics of this epoch have been discovered in the sepulchral chambers at Pæstum, among them scenes of the noblest beauty and the deepest expression; as, for instance, the representation of a youth carrying his wounded companion on horseback from the fight, now to be found in the museum at Naples (Fig. 183).

In the age which followed that of Alexander, an effort after real-

ism, combined with a partiality for representations of low life, for genre painting and still life, became gradually apparent. From the accounts of the ancients, we are justified in believing that this province of painting, the so-called "rhyparography," was also brought to a high state of perfection. The greatest fame in this department was acquired by Piraïcus, whose barbers' shop and shoemakers' stalls, still life, and other sketches of a humble order, but of great delicacy of execution, commanded, according to Pliny, higher prices than the more elaborate pictures of many other artists.

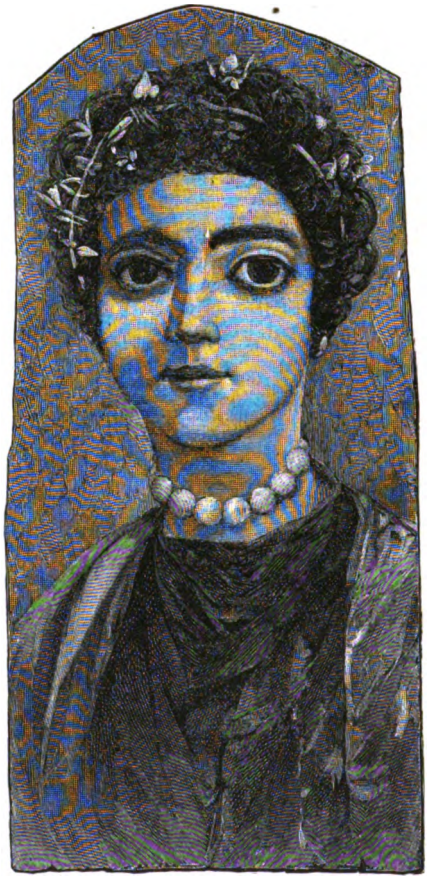


Fig. 185. Female Portrait from Fayoum.

Yet there were still masters who accomplished much that was admirable in a higher genre, among whom Timomachus is the last conspicuous example. From him we have an Aias and the Medea, which was purchased by Cæsar for eighty talents, and set up in the Temple of Penus Genetrix; and, besides these, an Iphigenia in Tauris, who, about to sacrifice her brother, is represented as filled with conflicting emotions. This passionate inward strife must have shown itself still more decidedly in the Medea, who was portrayed at the moment before her cruel deed, holding the sword in her hand, but hesitating whether to plunge it into the breasts of her own children. A copy of this picture is perhaps to be recognized in a fresco at Pompeii, now in the Museum of Naples.

To the most remarkable remains of Greek painting belong those that were discovered, not long ago, near the ancient city of Kerke in the Egyptian province of Fayoum, and are now the property of Mr. Th. Graf in Vienna. They are portraits, seventy-eight in all, which were painted upon the mummy-cases, otherwise usually decorated

with sculpture. Executed upon sycamore wood in the encaustic manner, they are of very unequal merit, as inferior mechanical productions alternate with others of artistic excellence. The best among them are conspicuous for their vigorous painting and their lifelike conception. The seriousness of the male heads is as happily rendered as is the frank comeliness, often verging on the childlike, of the female heads (see Figs. 184, 185). Side by side with Greek and Roman characteristics, a few Semitic and Ethiopian types also occur, so that it would seem that a late Hellenic art epoch, coeval with the Diadochi or successors of Alexander the Great, has here handed down to us monuments, valuable not only from the standpoint of art history, but also from that of the history of civilization.* In this age of increasing luxury, mosaic work appears to have been developed to a magnificent perfection. Among the masters of this art, Sosos is especially extolled, who executed at Pergamus "The Unswept House"; so called because he showed upon the floor, in a very skillful manner, the remains of a meal, and such things as are generally left scattered about. Tricks of that sort pleased the masses then, as now. Especial admiration was excited in this work by some doves, sitting drinking or sunning themselves on the edge of a vessel of water; a representation whose fidelity to nature can be partly judged by a mosaic of similar subject, perhaps even a copy, which is preserved in the Museum of the Capitol at Rome. Finally, we must not forget such splendid work as that of the wonderful mosaic found in Pompeii early in the nineteenth century, and let into the floor of the Hall of Flora, Naples Museum. This represents the defeat of an Oriental by a European king: generally admitted to be the battle of Issus (333 B.C.), in which the army of Darius, king of Persia, was routed by Alexander of Macedon. It is impossible to fix the date of this mosaic; but the Greek descent and character of the people of Pompeii, and the great number of works of Greek art even of early time which have been found there and in the ruins of Herculaneum, Bosco Reale, and other places in the Vesuvian region, authorize the modern student to look upon it as pure Greek in conception and treatment.

C.—PAINTING ON VASES.

Finally, the painted vases should be mentioned, which not only offer us in their forms admirable illustrations of the delicacy of the Greek sense of beauty, but are also of great importance because of

* Cf. G. Ebers and Donner v. Richter, in "Allgem. Zeitung," 1888; also R. Graul, in "Lützow's Zeitschrift," 1889, with illustrations.

the designs upon them.* When we think that these works are merely the adornment of vessels of baked clay, we cannot but be forced to admire these designs, often of unsurpassed freedom and beauty. It is not necessary to assume that all the vessels so painted were meant to be used in ordinary household service; on the contrary, we know that some were used as votive offerings, and some as prizes in athletic and other contests.

The painted vases found in Italy in great abundance were at first called "Etruscan," because often found in the land of that ancient people, the modern Tuscany. Early in the nineteenth century it was established that they were of Greek origin, and always the work either of the people of Greece proper or some Greek colony. These, however, as seen in the Naples Museum, the Louvre, and the British Museum, were the more elaborate pieces, with figure-subjects, and showing much skill of draughtsmanship. It was only in the second half of the nineteenth century that much attention was called to the simpler pieces.†

These vessels, discovered recently, not only by Schliemann in Troy, Tiryns, and Mycenæ, but also by General di Cesnola in Cyprus, and brought by the hundred from graves in the Levant, bear an ornamentation consisting chiefly of linear elements. It is the oldest straight-lined motives, too, borrowed from the technique of plaiting and weaving, such as rhomboids with parallel lines, zigzags, crosses, and the like, which cover the surfaces indiscriminately. Soon, however, they were blended with circular patterns based upon embossed bronze-work, and including concentric circles, dots, and spirals in manifold combinations. This mode of ornamentation also plays an important part, as we have seen, on the gold articles at Mycenæ. Gradually the imitation, as yet very awkward and childish, of human figures, is added, especially that of warriors; moreover, animals appear, particularly horses, cattle, goats, but also swans and other birds. Plant designs are well-nigh excluded. We shall have to designate this ornamentation not as primitive European, but rather as Asiatic in origin; and as belonging to very early civilization—in fact, as common to mankind in general in the first stages of development. If it survived longest in the north, where we specify it as Celtic, it was not lacking in the East—in Asia or in Egypt—only that there it was supplanted, at an immemorial period of antiquity, by a

* For an account of the historical development of vase-painting, see O. Zahn's description of the painted vases in the royal Bavarian collection, "Beschreibung der Galerie bemalter Vasen." Theodore Lau, Heinrich Brunn, P. F. Krell: "Die Griechischen Vasen." J. E. Harrison, D. E. McColl: "Greek Vase Painting."

† A. Conze, "Zur Geschichte der Anfänge griechischer Kunst"; Vienna, 1873. Birch, "History of Ancient Pottery."

higher phase of civilization which variously disguised and obliterated its traces.

These works of the men of the earliest primitive period, defined in Greece as the "Pelasgian," were succeeded by that phase of development where the influence of Oriental art was first felt.

Fig. 186. The Dodwell Vase. (Now at Munich.)

The most ancient style includes those simple vessels of moderate size that are now properly classed as Phœnician, and are treated above in the chapter on Phœnicia and Cyprus (but see Figs. 186, 187). They are fashioned in plain and but slightly developed proportions from clay of a yellowish or pale reddish color, and are painted in brown and black tints, with which violet and white are sparingly mingled, and a stronger red rather more frequently. Horizontal stripes form one or more friezes, encircling them like bands, that are either filled in with rosettes, or with lotus or other flowers, or—in the few richer and probably later pieces—with pictures of animals of a fantastic character. In the arrangement and form of this ornamentation, it is impossible to overlook the influence of an older Asiatic art. Pieces are found which, from the style of the drawing, must be of the fifth century B.C., and which still preserve something of the simple distribution and general design of the very ancient pieces (see Figs. 180, 181). In contrast with this most ancient and undoubtedly Doric style is another, most probably the old Attic, which is closely related to the former so far as color goes, but in its better proportions, and the greater dimensions of the vessels, as well as in its representation of gods and heroes, marks the transition to a succeeding period. The figures on these vases are sometimes stiff and lifeless, sometimes awkward and angular; the forms of the bodies are defined with unnatural sharpness; and the garments hang in regular folds.

Fig. 187. Greek Vases of the Older Style.

Then come the vases of the finest style, in which the form is not

only more varied, and the different work upon them more life-like and beautiful, but in which also a simplification of the older colors and the use of more tasteful and brilliant tints mark the progress toward the pure Hellenic manner. Ornaments used merely for the purpose of filling in are abandoned, and the carelessness with which they were disposed is now replaced by an arrangement which gives them more

Fig. 188. Vases of Beautiful and Rich Design.

meaning. The designs are admirably distributed over the space to be occupied; and the shining black in which they are painted is sharply relieved against the deep red of the ground of the vase. The figures themselves, however, retain in all respects the severe immobility, the strongly exaggerated characteristics, that are peculiar to the archaic style of Greek art.

A further stage of development can be traced in those vases which are completely covered with a fine polished black, from which the life-like figures stand out in the fine red color of the clay. The character

of these designs shows the transition going on within this class from a severe style to one of finished beauty (Fig. 188 *b, c, d*), which shows by its freedom of movement in the figures, their tasteful distribution over the surface of the vase, and by the delicate curve of its lines, that it is a product of a golden age of art. These classical productions of Grecian art are followed in the latest epoch by works of a still more elaborate style, in which the noble Greek symmetry of the work as a whole, and its adornment, give place to an exaggerated richness, that finds expression as well in enormous ornamental vessels, sometimes five feet in height, as in an overluxuriant superfluity of ornament (Fig. 188 *a*). The polished black background of the preceding epoch is still retained, and the figures stand out in the red color of the ground. But in the frequent use of other colors, especially of a pale yellow and white, as well as in the plentiful employment of luxuriant garlands of flowers and leaves, an admixture of foreign elements is again apparent. Indeed, these vases have mostly been found in Southern Italy, in Apulia and Lucania. Their subjects, too, consist, for the most part, of scenes from the legends of the heroes, although they often drop into the fashion of a later time by representing scenes of common life in great variety. The figures are drawn in a spirit of bold and even elegant conception, but, as a rule, with a certain dilettantism that not unfrequently degenerates into superficialness and carelessness. The epoch after Alexander, about the time of the beginning of Roman rule, is the most flourishing period of this latest phase of vase painting.

Chapter II.

ETRUSCAN ART.*

THE position of Italy resembles, in some respects, that of Greece. Separated from the northern countries of Europe by the lofty range of the Alps, it extends southward in a long and narrow peninsula. Here, as in Greece, the mildness of the climate favored the early attainment of a high stage of civilization. The situation of the country, washed on all sides by the sea, encouraged trade and navigation. But its greater distance from the Orient, the primeval scene of human development, made the intervention of the Greeks indispensable to the spread of general culture. Thus we find Greek colonies taking root in Southern Italy at a very early day, and not only extending into Sicily, but taking possession of the coasts of the lower peninsula, or Græcia Magna as it was called.

The regions of Central Italy were, however, in early times, less subject to these foreign influences. Divided by the Apennines and their many outlying spurs into a multitude of independent districts, they, like Greece, offered excellent opportunity for the varied development of different races. Though most of them, as their language shows, belonged to the same parent-stock from which the Greeks also sprang, the ancient Etruscans, with their distinct and unrelated language, still undeciphered by modern scholars, their widely different manners and customs, and their dissimilar forms and features, occupied, in the heart of Italy, the position of an absolutely independent and distinct people. They inhabited the region bounded by the Tiber, the Tyrrhenian Sea, and that branch of the Apennines which stretches in a wide arc between them, the greater part of which (the modern Tuscany) preserves even in its name the memory of the ancient Tusci.

Whatever may have been the fables and theories current as to the origin of this mysterious people, the obscurity surrounding it has never been dispelled; and the only theory which daily gathers probability is, that they came from the mountainous region to the north.

* Micali, "Storia degli antichi popoli Italiani; Monumenti inediti." Inghirami, "Monumenti Etruschi." Martha, Jules, "Manuel d'archéologie Etrusque et Romaine; L'art Etrusque."

The Etruscans seem, at a very remote period, to have migrated southward, attracted by the beauty of the country, and to have founded permanent settlements in Central Italy. That they came as conquerors, making an armed invasion of the region, may be inferred from the steep, impregnable sites of their ancient cities, which were united in a defensive alliance. As there was no higher bond of unity among them than this loose treaty, it is not to be wondered at that they were compelled to yield to the repeated onslaughts of the Romans in their early struggle for political leadership. After their subjugation, the race gradually disappeared from history as it had entered it, leaving no trace behind, and without handing down, either

Fig. 189. Restoration of an Etruscan Temple.

in political institutions or in the productions of an independent literature, a single evidence of their existence. It is only in the widespread burial-places in Central Italy that we find proofs of their having a system of architecture of their own, as well as some works showing artistic capacity—earthen vessels, stone sarcophagi, bronze castings, frescos, and valuable articles of jewelry. Many of these unmistakably show Greek influences; in others, there is an undeniable originality. The Etruscans appear in these pictures as a thick-set, broad-shouldered, ungraceful race of men, differing completely in this respect, as well as in the compressed and flat formation of the head and the projecting jaw and retreating forehead, from the conformation of the people of the Greek races. Their character, also, seems to have become distinct from that of the other Italian and Grecian inhabitants. In their religious beliefs there was an element of dark super-

stition, which sought to foretell the future by the study of omens. They held a dualistic belief, which acknowledged the existence of good and bad spirits that accompany human beings, and that seek—as is proved by the frescos in the sepulchers—to possess themselves of the souls of the dead. Further, a tendency to dark and troubled speculation upon the condition which awaited them after death added another to those traits in their character and disposition which furnished such deep and gloomy contrasts to the cheerfulness of the Hellenic religion. That idealistic conception which saw in the gods an elevation and etherealizing of human conditions had no place in the character of the Etruscans; and, with it, all exalted consecration and earnestness of thought were lacking in their art. Afterward, it is true, they, like all other Italian races, borrowed from the Greeks not only artistic forms, but also the material of their legendary and mythological traditions; but by doing so they really grafted a foreign branch upon the growth of their own art which at length completely overran and stifled its independent existence.

Fig. 190. From the Façade of a Tomb at Norchia.

We should never have known that the Etruscans possessed the art of building temples, had this not been shown to be the case by descriptions in various writings, especially in those of Vitruvius. The Etruscan temple, like the Grecian, had its origin in a wooden structure, such as is common to all mountain races; but only a part of it was afterward more completely developed by the use of more solid and permanent material. The entire upper part retained the wooden construction; and this distinction must have prevented the whole from presenting an harmonious and thoroughly artistic appearance. The realistic and the practical took precedence, as was in accordance with the character of the Etruscans. All conception of anything ideal was denied to this people; and in order to indicate the great importance of a building they could only deck it with rich ornamentation, but could not transform the very necessities of its construction into something noble and beautiful.

An almost perfect square formed the ground-plan of their temples, the front part of which was occupied by a pillared vestibule (Fig. 189), while the remainder was divided into three parallel apartments, the middle one being broader than those at the sides. Each of these had a separate entrance opening on the vestibule, and each had its special sacred image. The whole was surmounted by a high roof, the ponderous gable of which rose above slim columns, placed at wide

intervals apart, and above the conspiciously projecting ends of the cross-beams. We can form no idea of the artistic treatment of this broad, clumsy, ungraceful mass, although some remains that have been discovered give indications of a certain delicacy of form in the pedestals and capitals of the columns. Some façades of sepulchral chambers, especially those at Norchia (Fig. 190), show us this framework adorned with misapplied forms of Grecian architecture, especially with friezes divided by triglyphs. The point of the gable as well as its extremities, and the field of the pediment itself, were richly

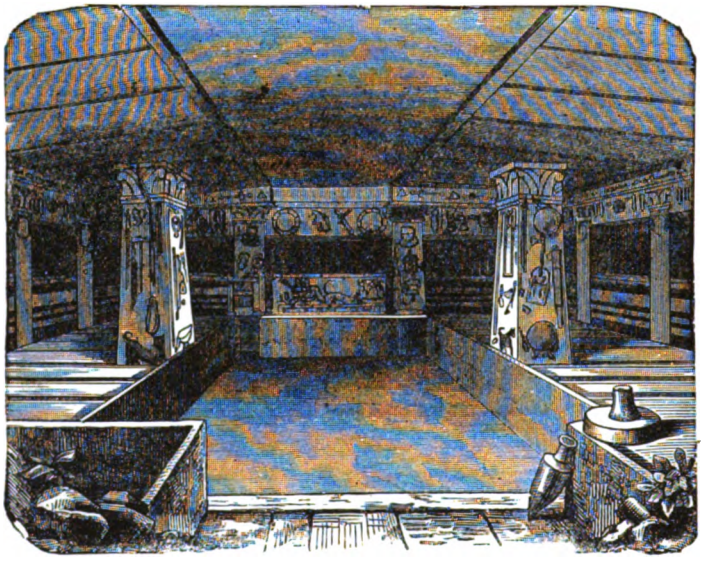


Fig. 191. Sepulchral Chamber at Cervetri.

ornamented with figures of terra cotta. It is certain that the Romans adopted the Etruscan style of temple architecture in the earliest periods of their history, and that their most ancient temple, that of Jupiter Capitolinus, was thus built.

Of another kind of Etruscan structures, on the other hand, there is still a great number preserved. These are the burial-places everywhere found in ancient Etruria. The simplest among them belong to that primitive type that remains in every part of the world as an evidence of the oldest forms of civilization. They are grave-mounds of earth and stone, often of large dimensions, and sometimes provided with a regular foundation of masonry. The interior contains a sepulchral chamber, which is oftentimes roofed by overlapping circles of stone. Sometimes the top of these mounds is surmounted

by cone-shaped memorial columns, to all appearance formed after a primitive Italian model that was still to be seen in the spina of the circus even in the later times of the Romans. The most imposing of these monuments is that which goes by the name of the Cucumella, at Vulci. The so-called Noraghes (Nurags), on the Island of Sardinia, bear a certain relationship to these architectural works, being conical stone buildings resembling towers, and containing several chambers one above the other, and vaulted, according to the primitive method, by overlapping the layers of stone.*

Other Etruscan tombs are hewn out of the rock like grottoes, forming either simple sepulchral chambers, or a series of connected rooms.

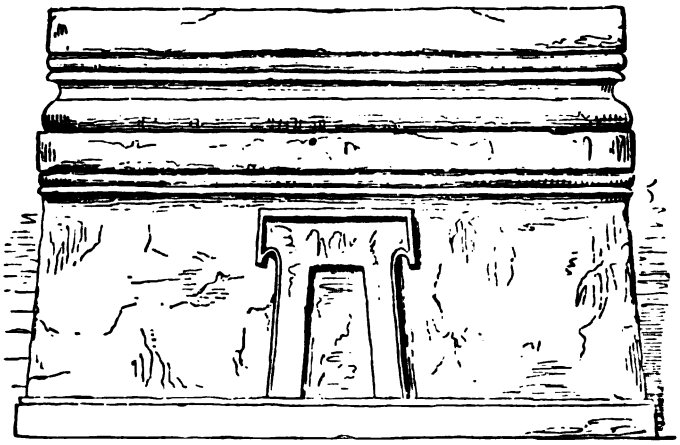


Fig. 192. Façade of Tomb at Castellaccio.

The roofs in these are often supported on pillars or columns; and occasionally a neat imitation of wooden rafterwork is seen upon the ceiling (Fig. 191). Tombs of this sort contain in the principal chamber the walled-up resting-places of the dead, whose bodies were generally laid at full length, in complete armor, and with their weapons placed beside them. Vases and other vessels stand about, and the walls are often ornamented with figure-painting. Graves of this sort have been found at Corneto (the ancient Tarquinia), Vulci, Cere, and at some other places. These monuments, that remind us so vividly of the Egyptian rock-tombs, possess a still greater importance when they are adorned on the outside by separate façades chiseled out of the rock (Fig. 192). A heavy cornice, consisting of several gracefully rounded parts, makes an appropriate border for the façade; but

* These monuments are by some ascribed to the Phœnicians; and certainly we have found among these people similar cone-shaped tombs.

in the middle a false door has been hewn out, which narrows toward the top, and the outer border of which projects at the upper corners. A number of such monuments have been discovered in secluded mountain ravines at Norchia and Castellaccio, as well as in some other places in the neighborhood. In two of those at Norchia that temple-like construction of the façade has been employed which betrays an adoption of Greek forms.

The art of defensive architecture was also, to some extent, artistically developed among the Etruscans. It is easy to discern in the ancient city walls of Cossa, Populonia, Tolli, and other places, the progress from the polygonic, cyclopean method of building, to the use of regular square blocks. In the gates, on the other hand, we sometimes encounter, for the first time in the progress of architecture, a form of construction, the discovery of which undoubtedly belongs to the clever, industrious Etruscans, and from whose introduction is to be dated a new and wonderful development. Here for the first time we find arches formed of artificially wedge-shaped stones, which substitute for the primitive unity of the architrave the artificial union of a series of closely connected parts, which, by their pressure upon one another, form a firmly combined vault. Of this sort is the ancient gate of Volterra, in which the keystone and the two end stones of the arch are emphasized by two outstretched heads, simple, but full of expression. The Cloaca Maxima at Rome, a sewer built in the sixth century B.C., in the time of the Tarquins, is one of the boldest and most important examples of this kind of arch. A similar arch is also shown in the Carcer Mamertinus, on the steep slope of the Capitoline Hill; while the primitive spring basin of the Tullianum below it is covered with overlapping horizontal layers of stone. Thus Etruscan architecture, by making an advance so important as in itself to mark an epoch, has won a permanent place in art history.

Fig. 193. The Etruscan Orator. (Florence.)

In plastic art the Etruscans were chiefly famous for their works in metal and baked clay. The latter were largely used in the decoration of temples; but even statues of the gods were made of similar material. Thus the statue in the Temple of Jupiter Capitolinus, as well as many others, was of clay. Much of this kind of work is to be found in the Italian museums; but it all shows a somewhat rough and unpolished style, and an awkward, clumsy, and often really erroneous

treatment of the body. To this branch of industry also belong the vases found in the tombs; sometimes cineraria, the covers of which are formed of grotesque representations of human heads; and sometimes vessels of unbaked black earthenware, decorated with rather roughly executed reliefs. In some of them the stem and handle are formed of figures; and the whole is so tastelessly overloaded with ornament as to give them an impression of fantastic oddity. The Campana collection, now in the Museum of the Louvre at Paris, is rich in examples of this kind of coarsely overloaded Etruscan ornamental work.

Modeling in clay soon led the Etruscans to the art of casting in

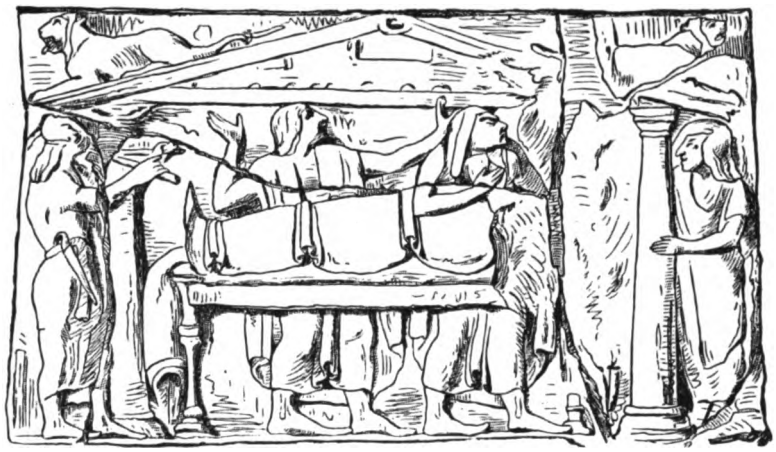


Fig. 194. Relief on Etruscan Tomb.

bronze, which they developed with great mechanical skill, and for which they showed special liking. In original works, and for decorative objects, this more beautiful material, often made still more brilliant by gilding, soon took the place of clay. The Etruscan towns must have been filled with bronze statues; and for a considerable period the Etruscans supplied the Romans with works of this description. Among the larger bronze castings which deserve mention are the Mars of Todi, in the Museum of the Vatican; a boy carrying a goose upon his arm, in the Leyden Museum; and a draped male figure, called the Orator, in the Uffizi Museum in Florence (Fig. 193); as well as the fantastic representation of the Chimæra in this same collection; and the She-Wolf in the Capitoline Museum at Rome—although of this, only the figure of the wolf is antique. The limits of the artistic talent of the Etruscans are clearly shown in these

works, the figures of animals being marked by a strong, realistically expressed likeness to life, even though treated in a crude, rigid style; while in the human figures, combined with an awkward, stiff modeling, and an exaggerated attention to details, there is a hard, lifeless character, in which the breath of a free inspiration is entirely wanting. Besides these larger works, there is a multitude of smaller bronze statuettes scattered about the different museums; but they rarely have any great artistic value.

The talent of the Etruscans appears to much better advantage in

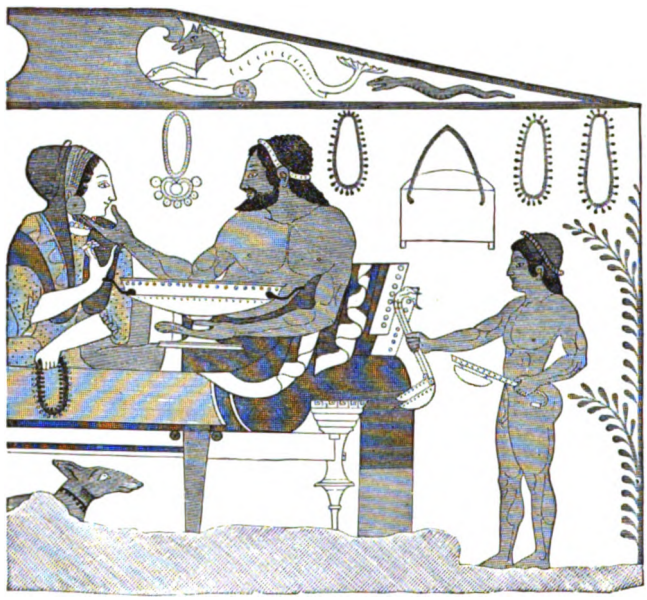


Fig. 195. Painting in Etruscan Sepulcher.

all those fields which are outside the domain of truly ideal art, but in which mechanical skill can excel; as in weapons and ornaments, helmets, shields, and armor, or in vases and jewelry. These, though they may want the delicate grace of the Greek mind, have a lasting worth because of their neat workmanship, and a certain fancy displayed in their modeling. Many such works are richly ornamented with engraved designs, of which we shall speak later. A good many works of sculpture in stone have also come down to us, among which those carved on altars and gravestones appear to be especially ancient (Fig. 194). They deal mostly with religious ceremonies, dances, and processions, especially with the forms and ceremonies of a highly developed cult of the dead. The heavy and stunted look of the figures,

the arrangement of the feet in profile while the trunk of the body is often seen in full-face, and many similar characteristics, give these works a strong resemblance to those of Oriental and archaic Greek art, although their composition undeniably inclines to a more crowded and picturesque arrangement. The numerous cinerary urns that have been found, and which are often made of alabaster, but more commonly of baked clay, and richly adorned with colors and gold, belong, on the other hand, to a much later time—probably to the last epoch of Etruscan activity in art. They are made in the shape of small sarcophagi, bearing on the lid the figure of the dead person stretched at length in a position of comfortable repose, and on the sides a number of devices in relief that relate to mythical subjects, or to the life

Fig. 196. Etruscan Wall-Painting.

of the soul in the lower regions. Done in a rude and mechanical fashion, they betray slight anatomical knowledge, and, as a rule, an overloaded, picturesque arrangement; and all this with a weakness in the expression of forms that plainly indicates an epoch of decline. Thus Etruscan sculpture, just as it was incapable of a truly ideal conception, seems to have been unable to find a golden mean between a hard and dry and a weak treatment.

Finally, the carved gems, which belong to a later period of Etruscan art, are also to be noticed. As regards form and subject they are under the influence of Greek art, and follow more especially the archaic style. The designs are borrowed from the myths of the Greeks, and the treatment is conscientious and finished; yet it is impossible to deny a tendency toward what is forced and exaggerated.

If a leaning toward picturesque conception can be discerned even in the plastic works of the Etruscans, the great quantity of paintings that have been discovered offer a complete proof of the partiality with

which this art was cultivated among them. The walls in the underground sepulchers are, as a general thing, covered with paintings that afford us an actual view of the style of Etruscan pictoral art. They are colored outline sketches, simply executed in bright, pleasing colors; representations taken from matters of every-day life—dances, tournaments, and hunts, banquets and festivals (Fig. 195), preparations for chariot-racing, and subjects of that sort—all full of life, but all exhibiting a certain sharpness of manner and looseness of movement that recall their primitive archaic models (Fig. 196). As a rule, green branches are arranged betwen the figures to fill out the space

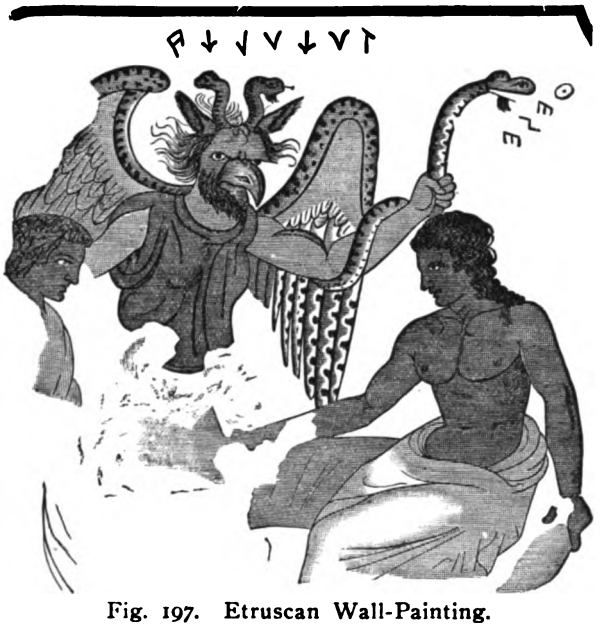


Fig. 197. Etruscan Wall-Painting.

and to mark the separation. Quite often a fantastic, one might almost say a comic, element is added, which finds expression in a facetious exaggeration of the movements depicted. But scenes of a more serious nature are also frequently to be found, taken from the cult of the dead, and representing ceremonies at a burial, or the fortunes of the soul after death (see Fig. 197). We see here the good and evil geniuses in their respective employments: in one case, the covered figure of the deceased being carried away in a chariot; in another, the evil genius sitting at the door of the nether world; and so forth. Then, again, we see the evil spirit writhing in wild agony, or the judge of the dead seated on the throne to judge the souls of the departed. Most of these paintings have been found at Tarquinium,

Veii, and Chiusi. They vary much in style—some being treated carefully, severely, and archaically; others, carelessly, and with a certain mannerism. The arrangement is confined throughout simply and clearly to the relief style, in which the influence of Greek works is unmistakably to be seen.

This relation is still more decidedly apparent in the engraved representations that are to be found in great numbers on bronze ornaments, especially on the backs of hand-mirrors and the sides of jewel-caskets, which were once thought to be mystic cistæ. They comprise, as a general thing, representations from Greek mythology and the heroic legends; although Etruscan myths, and subjects taken from real life, are occasionally found. They vary greatly in respect to the merit of the work and the mechanical execution. Often they are merely hastily scratched in; sometimes they are done with a sharp, angular movement of the lines, and a dry, bare treatment—as, for instance, a Birth of Minerva on a mirror in the museum at Bologna; but occasionally they display a nobility and an attractiveness that at once seem to indicate the hand of Greek artists, like the magnificent mirror in the museum at Berlin, which represents Bacchus and Semele. (Fig. 198 *a*. Under *b, c, d,* examples are given of the exquisite execution of utensils of this kind.) The composition is, as a rule, inclosed by a tasteful frame in the shape of a wreath of flowers and vines. This composition, in most cases, admirably fills out the circular plate of the mirror; although occasionally a somewhat crowded grouping of the figures again points to the Etruscan partiality for picturesque arrangement. The celebrated Ficoroni casket in the Museo Kircheriano of the Jesuit College in Rome unquestionably takes the first rank among these cistæ, or jewel-boxes.* Made, according to its inscription, by Novius Plautius at Rome, it has upon

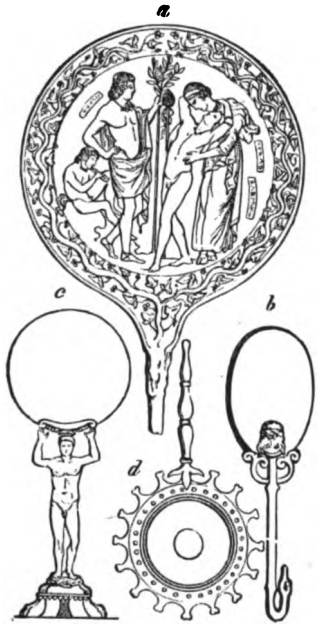


Fig. 198. Etruscan Mirrors.

* This celebrated casket has been often figured. An outline of the subject which surrounds it like a frieze is given in the "Dictionnaire des antiquités grecques et Romaines" of Messrs. Daremberg and Saglio, art. "Argonautæ." "It is cylindrical in shape, about 50 centimeters high by 42 in diameter."—GSELL-FELS' GUIDE: "Rom und die Campagna," col. 195; 1901.

its cylindrical outside side representations taken from the legend of the Argonauts. Polydeuces binds King Amycus, whom he has conquered, to a laurel tree; while Victory (Nikè) hovers over with a wreath and a girdle; and Athene, together with Apollo and certain Greek heroes, gazes at the scene. Near by, the *Argo* lies quietly at anchor. A few heroes have landed, by means of a ladder, to obtain a supply of water: some sit and lie in pleasant indolence on the deck. As far as the eye can reach stretch other peaceful scenes. The finish of the drawing, the nobility and the attractiveness of the figures, the freshness and life of the composition, are only to be explained by the influence of Hellenic works.

Painting on vases, so far as it can be traced with certainty to Etruscan hands, was certainly in a very low stage of development; for most of the works of this sort which were formerly attributed to the Etruscans have proved to be the productions of Greek workshops.

Chapter III

ROMAN ART.*

1. *Character of the Romans.*

NEARLY related as the Romans are to the Greeks, and certain as it is that they sprang from the same parent stock, it is yet difficult to realize their common family origin. In describing the vast difference, amounting even to antagonism, between them, it may be said that the Greeks were essentially an artistic, the Romans a political people. The Greeks conquered the world by beauty, the Romans by statecraft. As the sculpture and the poesy of Greece compel the admiration and imitation, even at this distant day, of men living, as it were, in another world, who reverence in them their highest models in the realm of the beautiful; so does the judiciary code of Rome still bind a large proportion of modern nations. Some deeper meaning, some intrinsic necessity, must lie at the foundations of such facts as these.

The Greeks were an ideal people, the Romans thoroughly practical. The Greeks founded states, planted colonies, brought remote and savage coasts under the influence of their culture; the Romans were moved less by the instinct of the civilizer than by that of the conqueror; and at that early day the former did not serve as an excuse for the latter. The ancient legend of the origin and growth of the Roman community indicates this inborn instinct, showing that violence and usurpation were the sign-manual of her citizenship, even in the natal hour of Rome. As though impelled by an inner law of necessity, having for its factors the situation of the town and the character of its inhabitants, the Romans overflowed their original limits, spreading more and more, subjugating the neighboring peoples—the widely diverse Etruscan, as well as the kindred Latin nations—until they swallowed up all Italy, with its Etruscan and Greek civilization, and advanced gradually but surely to the domination of the entire Mediterranean world. That in the course of a development so gradual, and bringing in its train changes so vast, the condition of

* Choisy, A., "Histoire de l'Architecture." Wickhoff, F., "Roman Art." Choisy, A., "L'art de bâtir chez les Romains."

the Roman people should have materially altered, was only natural. But the manifestations of essentially Roman character continue unchanged until the removal of the center of power from Italy to the East.

The dominant characteristic consists in an energetic, worldly wise, practical spirit, a resolute intelligence, directed toward acquisition and possession; and this explains their remarkable aptitude for the development of political life, and the precision with which they conceived, established, and perfected the idea of justice. It was a vigorous, powerful race, as wise as it was brave, possessing at its best a rough, manly virtue, whose loftiest ideal was based upon stern rectitude and ancient custom.

With the continual enlargement of the borders of the Empire, the consequent development of internal relations went hand in hand. The condition of citizenship betwen patrician and plebeian, the relations with allies and the foreign nations under its protection or subject to its rule, afforded just so many problems, in the solution of which statesmanlike wisdom and legislative capacity were frequently employed. Added to these was the relationship, in its many ramifications, which individuals and the family held toward the state. For, contrary to the usage of Greece, where family life was maintained apart in almost Oriental seclusion, and quite ignored by the state, the communal life of the Romans was based upon that of the family; so that, while with the Greeks a woman of purity lived, so to speak, in concealment, the Roman matron held her honorable place beside the father of the family in public life.

While the Romans thus ordered their home matters, conquered Italy and the Mediterranean lands, destroyed empires, overthrew and created monarchs, and dictated the world's laws, they remained in all ideal manifestations of spiritual life, in poetry and art, even in the expression of their religious thought, under the influence of the Greeks. In earliest times, Etruscan influences were undoubtedly predominant; but the Greek mind soon asserted itself. The divinities of Rome originated, for the most part, in the mythologies of their Italian neighbors, but several came directly from Greece and the Greek Olympus, the persons of the Hellenic mythology appearing under translated names; while here and there some new trait was created, or rougher setting bestowed. The people even strove to trace back its descent, through Æneas, to the Trojans of Greek heroic legend. The intuitive additions ingrafted upon this religious system partook rather of a moral and ethical than of a mythic, poetical character. Hence the Romans were not only lacking in a national epic, but they became the pupils and learned imitators of the Greeks

in all the principal schools of poetry, transplanting the epic as well as the drama of Hellas to the soil of Latium. The songs of Homer and the "Æneid" of Virgil stand in about the same relation to each other as do the elevated, idealistic humor of Aristophanes to the unpolished comedies of Plautus and Terence, which reflect, in subject and coloring, ordinary every-day life. The poetic schools which are Roman in their nature and origin, such as the didactic and satiric, are further witnesses of the decided preponderance of the elements of common sense, acute observation, and practical experience, over the higher idealistic, imaginative faculty. The same relative difference shows itself no less decidedly when we survey the realm of the plastic arts. The Romans themselves were late in developing any artistic genius. In this regard they were the voluntary pupils, first of the Etruscans, later of the Greeks. Art, with this people, was not something which the people had at heart, not a necessity of the national faith, not the emanation of an imagination excited by the divine ideals of the poets, but rather an article of luxury for the rich and the powerful, a servitor of greatness prepared and destined to adorn life, to glorify power, to attract the people. Architecture was especially adapted to this end, since its connection with the practical uses of living was most congenial to the Roman character, and also because their large resources and the demand for stateliness and splendor found a natural expression in buildings of a kind never imagined by the Greeks. It was in this branch of art, therefore, that they could produce most that was original and individual; it was here that they could most noticeably widen the range of ancient thought. Grandeur of design, variety of combination adapted to new and most practical exigencies, and great brilliancy of execution form the invariable characteristics and excellences of all Roman monuments.

Far less weighty is the debt we owe to the Romans in the provinces of sculpture and painting; indeed, it confines itself mainly to the fact of their having offered, as wealthy, splendor-loving patrons, an asylum to Greek artists when their own poverty-stricken, degenerate fatherland had no further need of them; thus making possible a series of new productions, and occasioning an important renaissance of Hellenistic art. This result once secured, a brief reign of original art began, and lasted so long, only, as the imperial energy remained undiminished—perhaps two centuries and a half. Notwithstanding the fact that the talent, skill, execution, even the range of subject, were Greek, the Romans acquired that modifying influence over their art which the race of patrons exercises over the artist class. The latter, consequently, devoted themselves partly to the repro-

duction and imitation of old masterpieces, partly to the creation of new works suited to the taste of the period for splendor and effectiveness, and appealing to its special genius; but nothing original and independent, in the strict sense of the words, was accomplished, save in the domains of historic representation and portraiture, and in decorative sculpture—a momentary blaze of sculpturesque design which anticipated the mediæval epoch of architectural plastic art. It was these branches of art that must appeal most strongly to the genius of a people, which illustrated its path through history by a series of splendid deeds, which loved to place the personality of individual generals and statesmen in the foreground, and, later, awarded even divine honors to its Cæsars and their race.

The greatest significance which the Romans have for the history of art lies in the fact of their wide sovereignty. While they laid a common yoke upon all nations, they gave them their art along with their legal statutes; or, to speak more accurately, the art of Greece, adopted and generalized by them, and prepared for a cosmopolitan acceptance. Here, for the first time, we see national difference obliterated, and art, freed from the demands and restraints of merely national ideas, reigning, a universal law, without distinction in Italy as in Greece, among the unpolished northern races of Germany and Gaul as among the ancient civilizations of the Orient.

2. *Roman Architecture.*

A.—ITS SYSTEM.

Nowhere does the eclectic, adaptable tendency of the Romans in their art creations appear so clearly as in their architecture. Their most ancient monuments were erected after Etruscan models; while, in their later ones, all traces of this earlier influence have passed away—except in the structure—and the acceptance of Greek form is universal. Only one important element of Etruscan art continued to be a lasting power in Roman architecture, which attained, by means of it, to a high degree of artistic perfection, viz.: the use of the true arch. At first employed in works of utility, like the Cloaca Maxima, mentioned above, for sewers, bridges, viaducts, the arch soon rose to extended use in ornamental building; and for the first time it became possible, by means of the strength and power of resistance which the construction of the arch afforded, to raise edifices of many stories of a solidity unsurpassed even by monumental masonry.

While only the mode employed by the Greeks and Orientals for roofing in a space by means of strong horizontal beams was known, the capacity of an architectural stone structure was limited to a minimum of space, dependent upon the natural qualifications of the stone in the supply of the flat beams required; but after the discovery that wedge-shaped stones could be built into an arch which is compactly and solidly bound together by the tendency of each component part toward a common center, architecture was in a great measure emancipated from its natural trammels; and it became possible to enlarge its scope, and vary its plans and subjects, beyond previous experience. In this, therefore, consists the importance of an improvement upon the construction of the arch as invented by the Etruscans, and developed and perfected by the Romans. By its means the latter solved problems more magnificent and varied than had ever before or since come within the scope of architectural skill, attaining results of a beauty and importance never since reached. The simplest among the arch structures of the Romans was the cylindrical vault as that is called which connects two opposite and parallel walls by a concave roof of uniform section. Opening at both ends in a semicircular arc, this form of the arch labors only under the disadvantage of requiring an equally strong lateral support throughout its entire length in order that the side-thrust of the arch may be resisted. Much freer and more generally adaptable in this respect is the cross-shaped vault invented by the Romans. This is formed when two cylindrical vaults cross each other at right angles over a quadrangular space. They thus unite, and partially support each other, intersecting at the two diagonal lines which connect the opposite corners. In this development the arch attains a greater adaptability, the supporting masonry being separated into four independent supports; and an organism is produced which is as variable as though instinct with life. A third form of the arch, the cupola or dome, was called into being by the Roman partiality for round structures. It may be described as a hollow hemisphere, built with horizontal layers of wedge-shaped stones, and shows the constructive principle of the arch adapted to a circular ground plan. The necessity of affording sufficient resistance to this form of the vault on every side necessitates a limitation in the use of it, as in the case of the cylindrical arch. In connection with the dome in Roman architecture, the semi-dome top is often employed in the apses which make so common a feature of their buildings. With this wealth of arch-forms it was found possible not only to enlarge the limits of buildings, and to carry out the design of the most varied ground-plans, but furthermore, by

the use of open arches and the employment of niches and recesses, to give to both exterior and interior walls the most spirited and varied forms.

This entire system would, however, have remained a rather plain, unornamental one had the Romans not borrowed an element of artistic ornamentation from another quarter. This was the columnar architecture of the Greeks, the richly developed beauties of which were soon pressed into the service of decorative art by the Roman builders. In the halls of basilicas and of the markets, as well as in the more richly decorated courts of their houses, but more especially in the arrangement of their temples, the Romans made lavish use of the Grecian column. Whether these temples were laid out on the Etruscan or the Grecian ground-plan, a splendid columnar adorn-

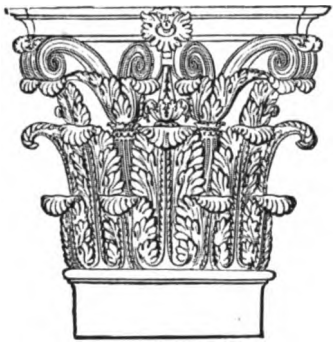


Fig. 199. Roman Corinthian Capital.

Fig. 200. Composite Capital.

ment was invariably added to the design, while either the stately Greek form of the peripteros or dipteros was employed; or, in the case of an Etruscan ground-plan—a depth of three or four rows of pillars was given to the portico while all around the outer wall a row of half-columns was ranged in pseudo-peripteral fashion. For this purpose the Doric and Ionic orders, although much modified from their original simplicity, were less popular, owing to their greater simplicity, and only frequently employed at an early epoch; whereas the more gorgeous Corinthian type was not only seized upon with especial delight, receiving the impress of that typical form by which we now know it almost exclusively (Fig. 199), but a new variety was produced by the Romans in the so-called Composite or Roman capital (Fig. 200), which appears in many forms in which the unwieldy magnificence of a coarser form of the Ionic capital crowns the two rows of daintily curved acanthus leaves. Not unfrequently one finds the three orders of Greek architecture employed upon the

same building to designate the separate stories; in which case the Doric is assigned to the lower, the Ionic to the middle, and the Corinthian to the upper section.

With this we reach the point which constitutes the importance of Roman architecture—the association of the column with the arch. That this was only an external, arbitrary union is a matter of course; the vaulted interior had no real need for the column. By the very conditions of its construction, the arch needed for its support strong piers and solid masses of masonry. In order to give these a more spirited character, the Greek columns, with their entablatures, were set like a loose frame about the bulk of the walls, either as half-columns or pilasters, or else as separate independent pillars, but always used for pure ornament. The law of the spaces between the columns was, in consequence, much less strictly observed; and a square bit of masonry was often given to single columns, as a pedestal or postament. In other respects, however, the Greek type was strictly adhered to except that the various orders were not infrequently arbitrarily mingled, bringing out the pediments more strongly by an accumulation of decorative adjuncts, and everywhere striving to give an expression of almost exaggerated splendor. Many great buildings were purely columnar in character, without vaulting; and in these, Greek systems of design were followed, except in the details. A desire is seen to bring all the three orders into a closer resemblance to one another, which, joined to a complete misconception of the primitive significance of the type, resulted in adding to the Doric frieze, for example (Fig. 201), a half-metope at its corners, while intending, doubtless, to correct and improve upon the irregular division of the triglyphs. In the same way, when the height of the columns, as was frequently the case, did not correspond to that of the building, a half-story with pilasters, a so-called *attica,* was added above one of the original stories. The columns were even more freely used in the last epoch of Roman art, when they were often employed in ornamental buildings of great size as direct supports for the cross-vaulting; though even then they retained their bit of entablature with frieze and cornice. For the cornice or corona, the Romans developed, while still conforming to the Corin-

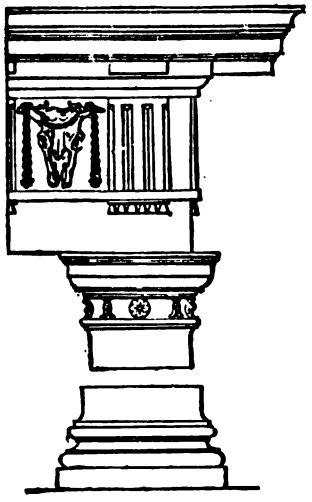


Fig. 201. Roman Doric Order.

thian style of architecture used by the Greeks, an especially splendid design (Fig. 202), which, for richness and beauty of effect, has never been equaled by any other cornice in the world. The same parts, similarly disposed, jut out also above such columns as are only employed as wall decorations, and form those square projections (see Fig. 208, over angle columns) which most plainly reveal the superficial, unsystematic character of this architecture. The introduction of paneled roofing from Greek temples, and its employment upon multiform arched surfaces, and also the species of architrave introduced into the profile of the simple arch (the archivolt), were, in an equal degree, signs of the incapacity of the Romans to create for their system of arches constructive art types evolved by necessity from its own conditions. They were able only to combine, to borrow, to assimilate, never to unfold from within, the idea of a new creation; and therefore their famous Thermæ, and such buildings as the Basilica of Maxentius and the Pantheon, are great as vaulted buildings, and have striking and costly pseudo-Greek columnar decorations—the two motives of design never quite brought into harmony.

In spite of these defects, the architecture of the Romans possesses undeniably great excellences. It immeasurably enlarged the range of architectural possibilities, and made practicable a variety of designs hitherto undreamed of by the employment of new building materials. The most striking illustration of this may be seen in the application of architectural art to the uses of daily life. Roman architecture not only gave forms as serviceable as they were beautiful to structures connected with streets and bridges, aqueducts and viaducts, walls and gates, but also to palaces and villas, halls of justice and market places, as well as those edifices dedicated to public amusement—the circus and the bath, the theater and the amphitheater. The stamp of lordship and of power was impressed upon the buildings of the Romans, as upon everything else which emanated from them; and the perfection of their construction and the excellence of their materials have yielded only to the shocks of the most overwhelming devastation, so that their very ruins testify to an almost imperishable magnificence. Nor are these monuments less remarkable for the beauty of their ornamentation, although the inherent

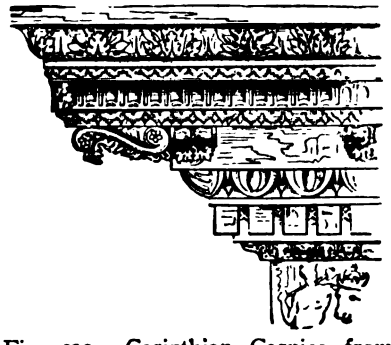


Fig. 202. Corinthian Cornice from the Arch of Titus.

grace and delicacy of the Greek types have been translated into an expression of greater robustness and fullness. Still, such was the skill of the chisel used upon them, and so ineffaceable their original loveliness, that even the mutilated, disfigured remains come down to us as illustrations of a system of ornamentation which has never been equaled by any subsequent order for its florid yet noble beauty. And inasmuch as the Romans erected countless monuments of their architectural style throughout their wide dominions, they gave to architecture that widely acknowledged position of importance whence, in the future and under the influence of Christianity, new and splendid developments were destined to arise.

B.—ITS MONUMENTS.

The most ancient epoch of Roman architecture appears to have been exclusively under Etruscan influences. We are aware that Roman temples were built after Etruscan models, and that the great sewers for the drainage of the town date from the reign of the Tarquins. The earlier epoch of the republic, which was a period of rigid simplicity of manners, was chiefly employed in the construction of architectural works for useful purposes. The Appian Way and various aqueducts are notable memorials of this epoch. However, the influence of Greece made itself felt betimes, especially after Greece had become a subject province of Rome, about 150 B.C. The first temples of any magnificence in the Greek manner were built from the spoils of Metellus' Macedonian campaign; and the superb development of the basilica dates from the same period. These last were edifices on the plan of an elongated parallelogram, whose wide inclosure was encircled by two stories of colonnades. While the great inclosed space was designed for purposes of trade and exchange, it is probable that the semicircular recess at one extremity served the purpose of a high tribunal, a seat of public judgment. Only scant remains survive of that distant period of Roman architecture; but these suffice to give us an idea of their peculiar, unadorned simplicity in form and material. The oldest buildings are constructed of a resistant, greenish-gray tufa, called *peperino,* unsuitable for elaboration of detail; but *travertine,* a species of limestone remarkable for its warm, fine tone and its durability, appears to have shortly come into general use.

One of the most important and at the same time historically interesting monuments of this period is the sarcophagus of L. Cornelius Scipio Barbatus, belonging to the early part of the third century before Christ, which was discovered in the subterranean

family vault of this famous race, excavated near the Porta Latina, and consigned to the Museum of the Vatican. The Doric triglyph frieze with its triglyphs in simple relief above, the rosettes in the metopes, the cumbrous cornice moulding with its dentils, the volutes at the angles, are all indications of an especially severe and simple acceptation of Greek details. The Temple of Fortuna Virilis is, on the other hand, an example of the Ionic order; the exquisite portico, with its six columns, which forms a pseudo-peripteral continuation of the walls of the cella, rising on its high foundations close beside the Tiber. The so-called Temple of Vesta at Tivoli is likewise an example of the earlier employment of the Composite style (Fig. 203), crowning with its graceful, circular structure, surrounded by pillars, a steep, rocky height above the foaming waters of the Anio. The ruins of the Tabularium, the ancient repository of the state archives, attest the grand, rugged characteristics of that old time. Built about 78 B.C., it crowns with its massive freestone pile, and its once open, vaulted halls, bordered by half-columns of the Doric order, that declivity of the Capitol opposite the less elevated Forum. And yet another example of the same epoch remains in the Tomb of Cecilia Metella, wife of the triumvir Crassus, situated on the Appian Way, and rising tower-like, circular, resting upon a square basement, and once crowned with a conical roof, no doubt. The picturesque battlements are of the Middle Ages, when the solid tower, nearly 98 feet in diameter, served as part of a fortress.

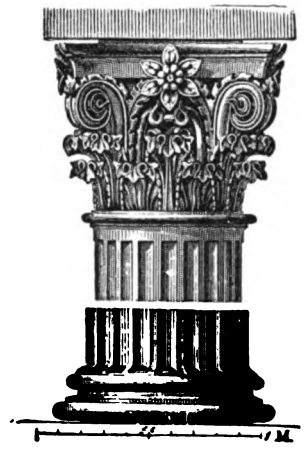


Fig. 203. Capital and Base from Temple of Vesta at Tivoli.

Toward the close of the republican period, during the struggles for individual sovereignty which shook the state to its center, architectural undertakings began to assume a magnitude and splendor which displayed princely ostentation in the place of republican simplicity. Although in the theater built by M. Scaurus, in 58 B.C., to accommodate eighty thousand spectators, only wood was used for the original construction, it was decorated with the most costly materials—gold, silver, and ivory—and adorned with splendid marble columns and numberless bronze statues. Only three years later, Pompey the Great erected the first stone theater in Rome, to accommodate forty thousand spectators—its summit crowned by a

The Flavian Amphitheatre in Rome (the Colosseum) built by the Flavian emperors Vespasian, Titus and Domitian, who reigned from A.D. 69 *to* 96. *The picture shows the inner circle of arches with, on the right, piers of an outer and the outermost circuit. The sloping buttresses are modern, put there to save the structure, whose partial ruin was caused by the use of the material in modern building.*

THE COLOSSEUM

temple of Venus Victrix. This building must have been of astonishing solidity and splendor for the time, preceding the great Thermæ and the Pantheon, and having only the Basilica Æmilia to rival it—that building having been begun at almost exactly the same time. Both buildings are completely destroyed, or covered by modern construction and by the new deposits of rubbish and soil.

Julius Cæsar went beyond all his predecessors in the magnificence of the structures with which he endowed the city. He built an amphitheater, which was protected from the sun by a vast silken canopy; he began the building of a stone theater, which was completed by Augustus; he enlarged and beautified the Circus Maximus, which, according to the lowest calculation, seated a hundred and fifty thousand persons; he erected the gorgeous Julian Basilica, the marble floor and substructure of which have been discovered in recent times on the south side of the Forum; finally, he went so far as to build a new forum, adjoining the Forum Romanum on the north, which he adorned with a statue of the Venus Genetrix.

All this, however, was merely the introduction to that magnificent Augustan period which forms the noblest and most brilliant epoch of Roman national life. It was under Augustus that Roman architecture may be thought to have attained to its culminating glory—just as his reign is regarded as the golden age of Latin literature, illuminated as it was by the first stars of Roman poetry—by such names as Virgil, Ovid, Horace, Tibullus and Propertius. It is true that Augustus left no buildings which could rival in extent and splendor those of Vespasian and Titus, or those of Trajan and Hadrian. In his time the peculiarly Roman construction with such masses of mortar-masonry had not been perfected, nor would his builders have dared undertake such a vaulted structure as the Basilica of Maxentius and Constantine, finished three hundred years after the death of Augustus, but the delicacy of design and the refinement and charm of sculptured decoration of the buildings of the earlier epoch, so far as we know them, was never equaled at a later period. Augustus not only completed the unfinished undertakings of Cæsar, not only restored eighty-two temples, among them the most sublime and famous buildings of antiquity, but he likewise erected magnificent structures for popular assemblies; and, above all, he built a new forum, called after himself, the outer walls of which, with remains of a splendid adjoining temple, are still in existence. Of this temple, which Augustus vowed to Mars Ultor (the Avenger) during the battle of Actium, there yet remain three Corinthian pillars, as also a portion of the cella wall and of the beautiful paneled ceiling, which are justly admired as among the noblest remains of Roman art.

In the year 13 B.C. Augustus completed the Theater of Marcellus, begun by Cæsar, and so called in honor of a son-in-law of the Emperor. The massive remains of this building still exist in the Palazzo Orsini, which has been built into the old ruins by making use of the exterior walls. A considerable part of the semicircular masonry is still to be seen in solid travertine freestone, besides fragments of both lower stories, framed by Doric and Ionic pilasters and striking entablatures of a severely simple, easy treatment, even retaining the

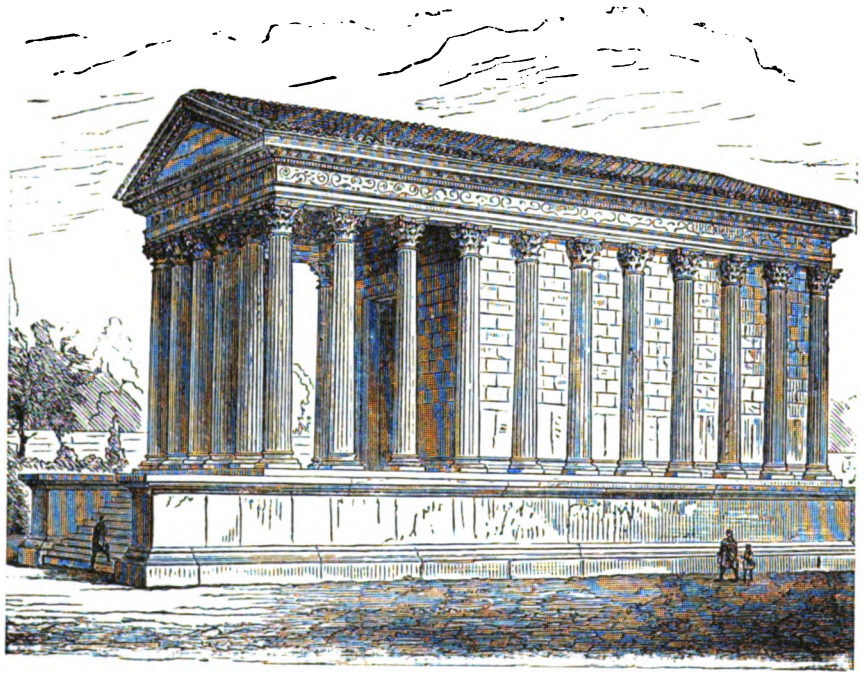


Fig. 204. Maison Carrée at Nimes.

triglyph frieze. This theater once accommodated thirty thousand spectators. There are still preserved in the wretched quarter of the Ghetto and in a neighboring fish-market a few fine Corinthian marble columns, with their entablature, which once formed a part of the magnificent Portico of Octavia, whose colonnades, adjoining the theater, afforded a shady promenade for the people. Of the Emperor's grand mausoleum, which formerly towered aloft—a mighty terraced mountain,planted with trees and adorned at its highest point with the bronze statue of the Emperor—there remain nothing but the great foundation walls, 220 feet in diameter, in the ancient Campo di Marte, now a place for circus-riding and spectacles of like

nature. The infinite variety in memorial monuments even at that early day is exemplified by the Pyramid of Cestius, a slender, artistically decorated structure near the Porta San Paolo, within which is concealed a small mortuary chamber adorned with paintings.

Out of Rome, the elegant Temple of Augustus and Roma, at Pola in Istria, is a well-preserved specimen of the noble type of the Corinthian style, and of the union of Greek forms with Italian ground plans; for, according to an old tradition of the country, a deep vestibule was annexed in this case also to the simple cella. Yet more important is the beautiful temple at Nîmes, in the south of France, locally known as the *"Maison Carrée"* (Fig. 204). There are also triumphal arches of this period at Rimini, Susa, and Aosta, all of simple plan and construction.

The peculiar glory of the Augustan age cannot be understood without considering its sculpture; but this, so far as we know it, was mainly connected with building. The finest work of the combined arts was perhaps the Ara Pacis, the great altar set up to commemorate the giving of peace to the whole Mediterranean world—the Pax Romana. The altar itself stood on a raised platform and was surrounded by a high wall, the whole structure reaching a height of thirty feet.

To the same period belongs Vitruvius' text-book of architecture, which, most curiously, does not allude in the remotest way to arch and vault construction, and offers little besides an academic receipt for the application of Greek models.

After Augustus, whose pride it was to have transformed a city of brick into one of marble, the passion for architecture seems to have been for a while on the wane. It is most probable, however, that the three columns, with entablature and cornice, which rise to the south of the Forum, and formerly were known as the Temple of Jupiter Stator, may be a monument of the time of Tiberius and Caligula. Under these emperors the ancient Temple of the Dioscuri was renovated; and recently it has been proved beyond a doubt that the ruins of the Temple of Castor and Pollux may be traced in these remains. Pillars, entablature, and cornice are unsurpassed, for purity of style, beauty, and elegance, by any of the antiquities of Rome. A work of great magnificence belongs to the reign of Claudius also—the double Aqueduct of the Anio Novus and the Aqua Claudia, the ruins of whose stupendous brick arches still traverse the Campagna and the vineyard suburbs of Rome, and with their superb growth of ivy and other creeping plants form a chief charm of the Villa Wolkonsky. Where this aqueduct entered the town there rises a mighty double gate, still preserved under the name

of the Porta Maggiore—an imposing structure owing to the scale on which it is planned, though tasteless in construction, over whose entrance-ways the two water pipes of masonry are conducted. Shortly after its completion, Nero laid the town in ashes, only that he might cause it to rise again in greater splendor, and with a more stately plan than before, and that he might build upon a part of the ruins his "Golden House," a structure of unheard-of magnificence, which, however, after the murder of Nero, was almost wholly destroyed and was replaced by other buildings.

To this period belong the latest monuments of Pompeii, through which we gain an insight into the transition stage from the Hellenistic to the Roman type. Visited by an earthquake in A.D. 63, which was followed, sixteen years later, by the destruction of the city by an eruption of Vesuvius, Pompeii, with its remains, offers us a picture of the condition of a small Italian provincial town of the period. The Greek architectural type, in its later development, appears particularly in the triangular Forum, and in the temple included within

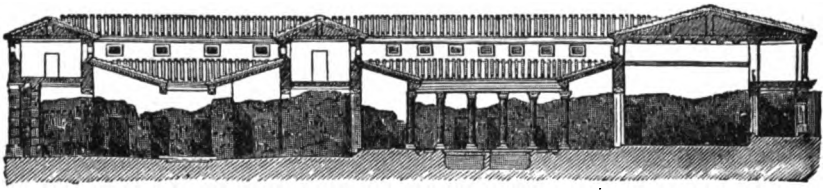


Fig. 205. Section of the House of Pansa at Pompeii.

its precincts. The theater displays in its plan a mixture of Hellenistic and Roman principles, while the Roman influence preponderates in the Forum and in its temple, and in the Basilica. Regarding these structures, as well as the triumphal arches, the baths, the amphitheater, the other temples, the town walls with their gates, the Street of the Tombs with its monuments, as a duodecimo edition, so to speak, of the then existing condition of Rome, what, nevertheless, appeals most strongly to our interest is the large number of dwelling houses (Figs. 205, 206) which have been excavated, because they are almost the only specimens—except one or two in Rome itself—remaining to us of architecture applied to private dwellings as developed by the ancients. In them we distinctly recognize the ground plan of all Roman houses, constantly repeated through all varieties of development. Each stately dwelling house has its double plan—an anterior portion for more public use, a posterior edifice reserved especially for the family (Fig. 205). In each portion the apartments are grouped about an *atrium,* or open court, the outer

inclosure being, as a rule, small and simple, in the Etruscan style; while the inner one is surrounded by a colonnade, according to the Grecian model, from which it takes its common name, peristyle. The center of the *atrium* forms the *impluvium*, where a deep basin gathers the rain water from the encircling overhanging roofs. A hall in the center of the house, designed for the portraits of ancestors, and called the *tablinum*, occupied a considerable space and connected the two sections of the mansion. In the neighborhood of the sleeping apartments and living rooms is the *triclinium*, or dining hall, especially remarkable for elegance of decoration. In the upper story the slaves were accustomed to sleep and work. The rich painting

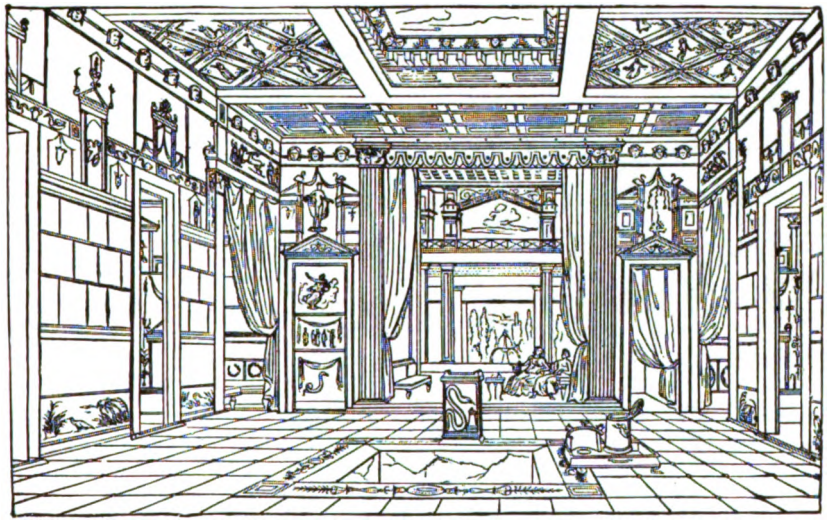


Fig. 206. Atrium in the so-called House of Sallust at Pompeii.

on the walls, the mosaic finish of the floors, diffuse over this delightful shade an inimitable charm, suggestive of physical luxury and a bright enjoyment of life. Recently, in the Palace of the Cæsars, on the Palatine hill at Rome, there has been excavated that splendid specimen of an antique dwelling in which it has been sought to trace the ancestral home of Tiberius.

With the Flavians (A.D. 69) begins the second brilliant epoch of Roman architecture, the relics of which equal, to say the least, the earlier ruins in vastness, and surpass them in splendor. Below is given the Colosseum, the Flavian amphitheater begun by Vespasian, and completed by Titus A.D. 70, the mightiest Roman ruin in the world (Fig. 207). About 600 feet long and over 500 feet wide,

the vast oval inclosed by its walls accommodated eighty thousand spectators; and on its arena were exhibited those gladiatorial combats and wild beast fights in which the rough and unpolished Roman crowd delighted. Round about rose the rows of seats, one above another like steps, supported by vaulted corridors, the topmost tier being inclosed by a colonnade. An encircling wall, over 150 feet high, incloses in an enormous shell of travertine the kernel of the giant structure. Though it has been in part destroyed by violence, the northern side, still in a good state of preservation, exhibits three

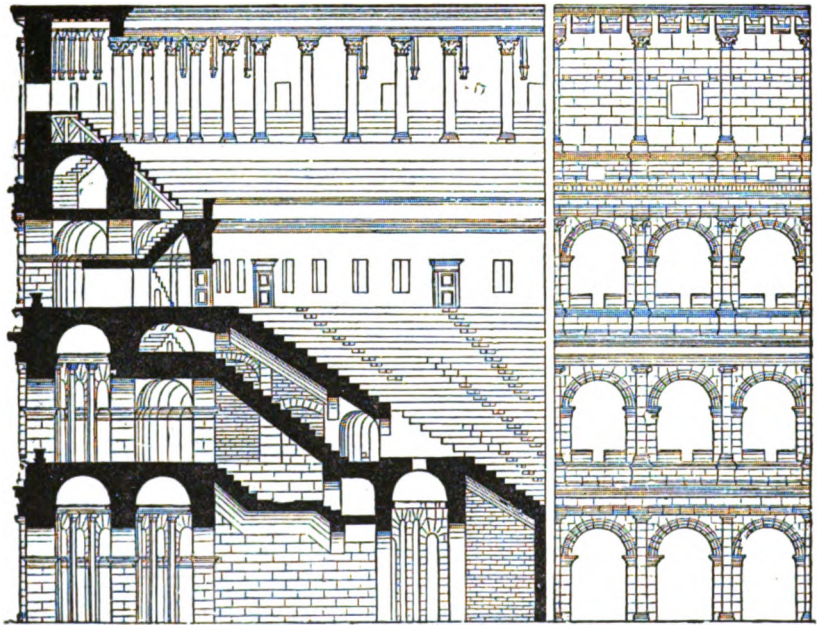


Fig. 207. Section and Portion of the Elevation of the Colosseum.

tiers of arcades one above the other, enframed by Doric, Ionic, and Corinthian pilasters, with their entablatures, and surmounted by a fourth story, furnished with windows, and adorned with Corinthian pilasters. In the great cornice of this upper story we still perceive the holes for the poles, to which was fastened the immense canopy that was spread over the whole vast space as a protection from the sun.

There likewise exist considerable remains of the Baths of Titus in the neighborhood of the Colosseum, especially remarkable for the elegant frescos, the discovery of which during the time of Raphael suggested one of the noblest works of the Renaissance—the

painted Loggie of the Vatican. We may further notice, as belonging to this epoch, those three rich Corinthian columns on the slope of the Capitoline Hill, which were formerly known under the name of the Temple of Jupiter Tonans, but have recently been identified as the Temple of Vespasian. Of still more architectural importance is the Arch of Titus (Fig. 208), at the end of the Via Sacra, which was dedicated to the Emperor in the year 81 A.D. in commemoration of his victory over the Jews and the destruction of Jerusalem.

Fig. 208. Arch of Titus.

Here the monumental type of the triumphal arch invented by the Romans is for the first time given in perfection, though in simple design; for only a single lofty, vaulted passageway is introduced between solid masses of masonry, set round with pilasters on postaments, upon which appears, for the first time, the robust type of the Roman composite capital. The walls are relieved by window-like niches; the attica above the columns bears the dedicatory inscription; the walls inside, on either hand, are adorned with superb relievos, and the vaulted arch with rosettes in sunk panels; while a group of four bronze horses, with the figure of the triumphant hero, once magnificently crowned the platform above the attica.

Of the new Forum, which was begun by Domitian, and finished and named by Nerva, there only remain, between the Roman and the Augustan Forums, a few beautiful, half-buried Corinthian columns, with a rich frieze adorned with relievo, and a lofty attica, on which appears the figure in relievo of Athene, as patroness of female works. The temple which occupied the centre of the Forum, and was only destroyed in the seventeenth century, was dedicated to her. But the Forum of Trajan, founded by that Emperor (98-117), surpassed all its predecessors in magnificence, size, and splendor. Constructed by the architect Apollodorus of Damascus, its northern end was occupied by the mighty Ulpian basilica with its five naves, and

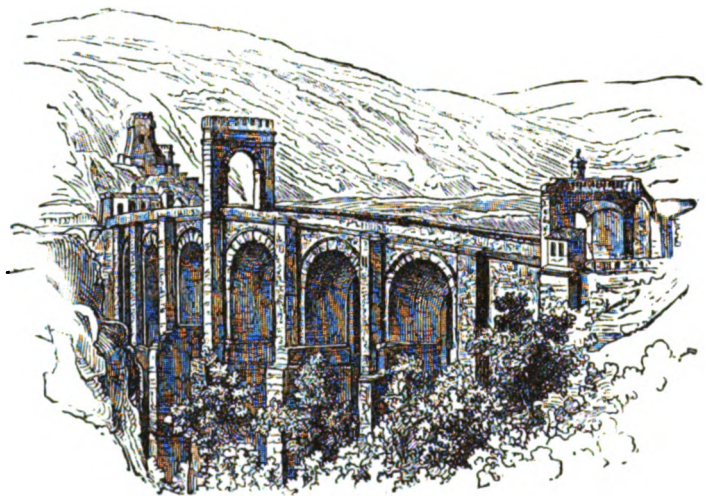


Fig. 209. Bridge of Alcántara.

the marble column supporting the Emperor's statue, the height of which (92 feet) recorded the height of the hill which the workmen were obliged to level in order to obtain room for the foundation. Besides this column, richly adorned with relievos, there is none of the pillars extant, except the fragments, excavated by the French, of the granite columns which once supported the roof of the basilica. Other still more stupendous remains of granite columns belong to the temple which Hadrian erected on this spot in honor of Trajan.

Besides the triumphal arch at the entrance of the Forum, there was another similar triumphal gateway built in Rome, the fragments of which were later employed in the Triumphal Arch of Constantine. Doubtless this, the richest and most magnificent monument of its kind, with its threefold archways, with its splendid plastic

Arch of Constantine, near the Colosseum at Rome. It was built by Constantinus I., called the Great, who died in 337; *but the sculptures were taken from earlier buildings, except the low reliefs above the arches and a few other parts, which are of Constantine's time. These show the great degradation of sculpture in the fourth century.*

THE ARCH OF CONSTANTINE

decoration and purely harmonious adjuncts, preserves for us, even at this day, all the essentials of Trajan's great work. Built entirely of Pentelic marble, it is equally admirable for nobility of proportion and for delicacy of workmanship. Another Arch of Trajan, single-gated, but likewise richly adorned with sculptures, is well preserved at Benevento; and another, not so elaborate, stands at Ancona, on the Adriatic Sea. This Emperor erected several important monuments in his native Spain, such as the Bridge of Alcántara (Fig. 209), which also has a triumphal arch connected with it, and some more simply designed triumphal gateways.

Not less ambitious in their conception were the architectural enter-

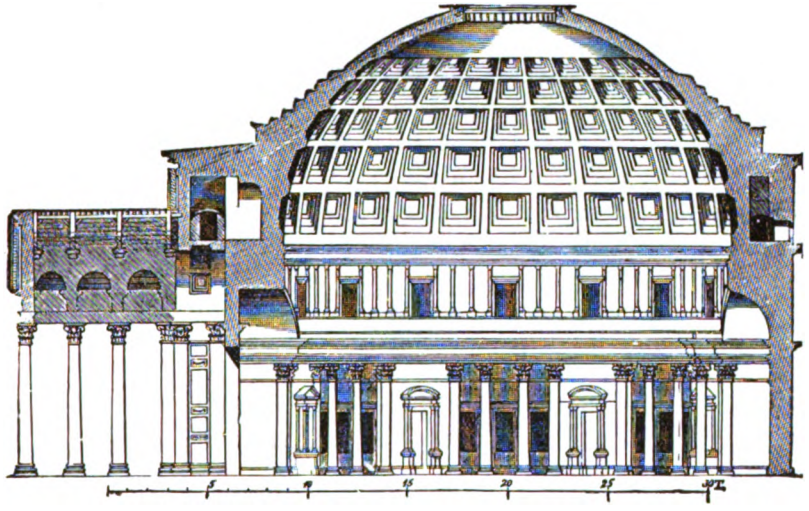


Fig. 210. Section of the Pantheon.

prises of Hadrian (117-138), but they express a more liberal, classic, retrospective grasp of Hellenistic ideals. One of his grandest designs was the Temple of Venus and Roma, which he reared upon a lofty foundation on the eastern edge of the Forum, opposite the Colosseum, and which was famous for being the most colossal among Roman temples. The design, however, is artificial and forced, for the twin temples, with their great niches for the statues of the deities, are built close together, back to back, causing their vestibule entrances to be located at opposite extremities. The external wall, supplied with small niches, as well as the apses, with their rhomboidal, paneled half-domes, is still standing in part. The ancient cylindrical vaulting of the cellas has, however, utterly vanished; and the seventy-two marble columns which formed a peripteral portico, and two

vestibules around the temple, have shared the same fate. There only remain, scattered about here and there, a few colossal ruins of the granite pillars which once supported the porticos of the temple court —vast structures 500 feet long and 300 feet wide. A single marble stairway led up from the Forum, and a double one from the Colosseum, to the terraced elevation on which the temple stood. Another mighty monument of this epoch is the present Castle of St. Angelo, originally erected as the Mausoleum of Hadrian. The circular monument rises tower-like on a square base, has a diameter of 226 feet, built in travertine freestone. Deep below ground is the mortuary chamber of the Emperor, which is reached by descending a spirally constructed, covered passageway. Parian marble once incased the whole enormous structure, and the summit was crowned by a bronze *quadriga*. Only a chaotic mass of ruins, spread over an enormous space, remain of Hadrian's Villa at Tivoli.

Of all Hadrian's buildings the most interesting is the Pantheon, built on the site of that building which was raised by Agrippa in the reign of Augustus. The new building assumes the circular form, which was such a favorite in ancient Italian art; and is crowned, perhaps for the first time in a building of such proportions, with a cupola. In fact, this remains the largest cupola in existence, and its great solidity gives it a rank apart. The interior of the building measures 132 feet in diameter, as well as in height to the top of the cupola within. The walls are broken by seven niches and the recess of the great doorway; three of the recesses being semicircular, and, alternating with them and the doorway, are four rectangular, wherein at a later period splendid marble columns with entablatures were introduced. Above these rises an attica with pilasters, the original position of which has undoubtedly been changed. Above the attica rises the enormous dome, in the form of a hemisphere, which has at the top a round opening, 26 feet in diameter, through which a flood of light pours into the space beneath. This great oculus still retains the bronze ring which sustains the masonry at that point; but the shutter which once tempered or changed the flood of light, and intercepted rain, has been lost. Its simple regularity, the beauty of its parts, the magnificence of the materials employed, the quiet harmony resulting from the method of illumination, give to the interior a solemnly sublime character, which has hardly been impaired even by the subsequent somewhat inharmonious alterations. These have especially affected the cupola, the beautiful and effectively graded panels of which were formerly richly adorned with bronze ornaments. In the same way the marble decorations of the attica were removed during the last century, and commonplace scene-paint-

ing was substituted. Only the splendid columns of yellow marble (*giallo antico*), with white marble capitals and bases, and the marble decorations of the lower walls, bear witness to the earlier magnificence of the building. The caryatides, which, according to the best testimony of Pliny, adorned the interior, were in the earlier building and have disappeared; but it may be taken for granted that if they were set up in the present rotunda, the place they once occupied is above the entablature of the columns. The building is provided

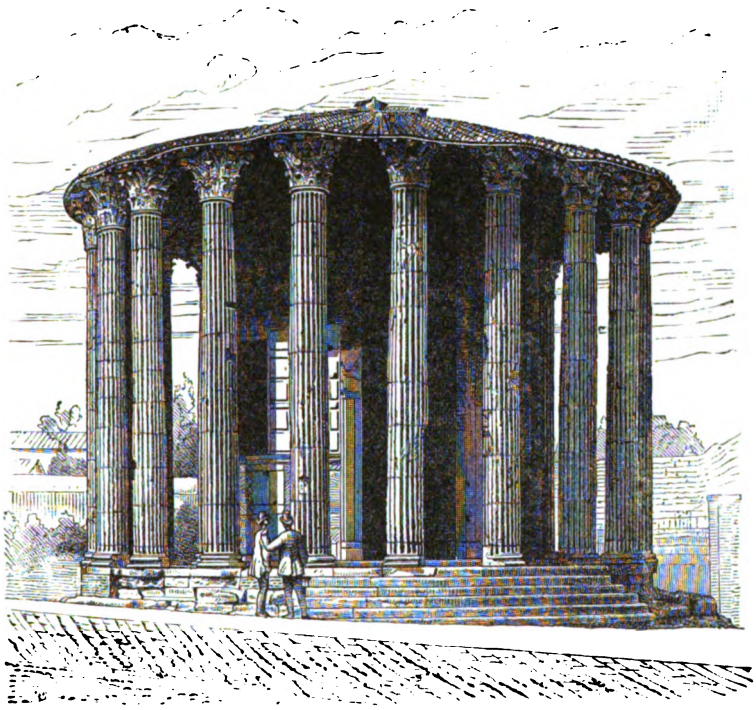


Fig. 211. Round Temple (of Vesta?) at Rome.

with a porch, splendidly adorned with sixteen Corinthian columns, eight of which support the outer fronton, while the remaining eight divide the singularly deep vestibule into three aisles, the central one of which leads up to the great entrance door, while the others end in niches. This columnar porch is much out of keeping with the rotunda. It may be that it is a relic of the Pantheon of Agrippa. The roof formerly had bronze ornaments, which were barbarously removed in the reign of Pope Urban VIII., and appropriated to the unwieldy altar canopy (the baldachin) of St. Peter's. The exterior is otherwise simple and unadorned, without windows, and was prob-

ably sheathed with marble below, and above overlaid with stucco. Although it must be conceded that the connection between the vestibule and the circular building is of the slightest description, one form in no way suggesting the other, nevertheless the impression made by the edifice as a whole is singularly imposing, while the interior is unsurpassed for grandeur.

After Rome, Athens especially was adorned by Hadrian with numberless costly structures; and among them is still preserved a triumphal gateway, which united the new portion of the town, built by him, with the ancient city. Besides this, he constructed a pantheon, an aqueduct, and other monuments, and completed the gigantic undertaking of the Temple of the Olympian Zeus, the oldest portion of which dated back to the time of Pisistratus.

The refined tendency of Hadrian's era—bordering already, however, upon the insipid academic school—was followed by a gradual decadence of the more vital architectural idea; by a clumsier and more curtailed method of treatment, a partial degeneracy of form. We recognize this fact even in the Temple of Antoninus and Faustina, belonging to the period of Antoninus Pius (138-161), the vestibule of which, with its gorgeous columns of cipollino, and the walls of the cellæ with their richly executed frieze, are still to be seen. Marcus Aurelius has left us (161-180) the stately column erected by him in imitation of the Column of Trajan. A ruin in its neighborhood, consisting of eleven gigantic columns, with pediment and entablature, which already exhibit that bellying, convex shape of the frieze, which is a sign of degeneracy at a later period, must be referred to this era. The *dogana* (custom house) of to-day is built into the wall of this temple.

The Triumphal Arch of Septimius Severus, built on the declivity of the Capitoline Hill in the year 203, a copy of that of Trajan in general design, but of less noble proportions, heavier, and overladen with reliefs, without distinct architectural division, introduces the epoch of decay ushered in with the third century. The architecture of the Goldsmiths' Arch, erected in the Forum Boarium by the craft of goldsmiths in honor of this Emperor, is completely swallowed up in a reckless superfluity of ornament and sculptured decoration. The elegant circular building, with its Corinthian colonnade, known under the name of the Temple of Vesta (Fig. 211), belongs to about the same period.

Under Caracalla was built one of the grandest and most splendid of the thermæ—structures whose massive ruins rise above the surrounding waste like some mountain which has been rent by a convulsion of nature. Even in the terrible devastation they have suf-

fered, they show the magnificent symmetry of their innumerable apartments, appropriated to an infinite variety of baths, or arranged for promenades, for ball and other games, for reading, and for refined revelry. There are titanic halls, whose vaulted roofs lie at one's feet in broken masses of artificial rock, partly hiding the splendid mosaic of the floors, partly overgrown by wild-thorn bushes and perennial roses. To the main building are annexed galleries, anterooms, and bathing-rooms, of which there were so many that sixteen hundred marble chairs could be used at one time for bathing pur-

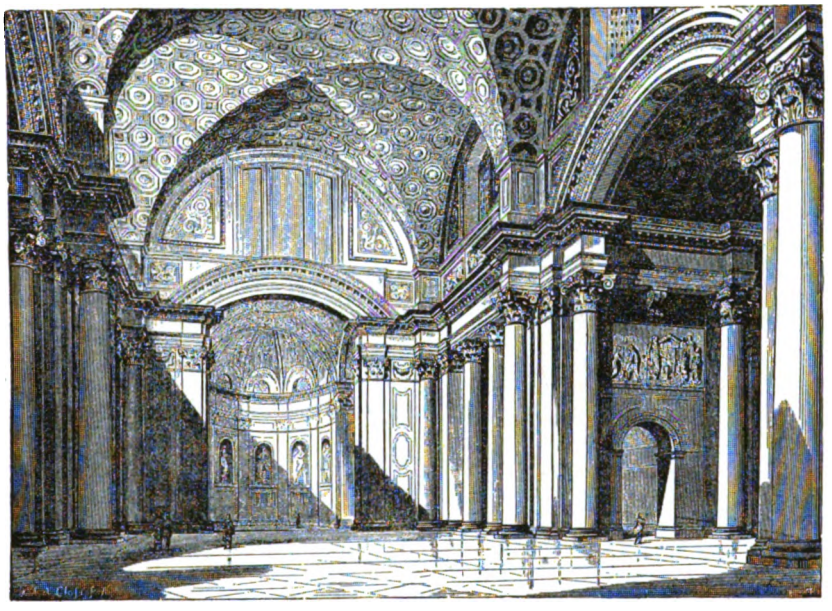


Fig. 212. Baths of Diocletian.

poses. Priceless columns, princely paintings and sculptures, adorned this colossal structure, among whose ruins master-works such as the Farnese Bull, the Hercules, and the Flora, of Naples, have been discovered.

The architectural enterprises of this last period of Roman dominion continue to grow more and more ambitious and gigantic. To the beginning of the fourth century (303) belong the Thermæ of Diocletian (Fig. 212), even more remarkable than the marvelous Baths of Caracalla, though essentially only an imitation of them. Their remains cover a vast surface. The principal hall, roofed in by three crossed vaults with a span of 80 feet, and supported on

columns of granite, was converted by Michael Angelo into the Church of Santa Maria degli Angeli. It is one of the mightiest vaulted apartments in the world.

One of the most important works of Diocletian was that palace of his at Salona in Dalmatia, whose mighty ruins have given its name and existence to the modern town of Spalato (Palatium, hence Palato and Spalato). In this, a striking deterioration of the antique type is everywhere conspicuous: there are cushion friezes, misshappen pediments, and similar new architectural arrangements—as, for instance, the immediate springing of the arch from the column—proving how the bonds of antique tradition had already been broken (Fig.

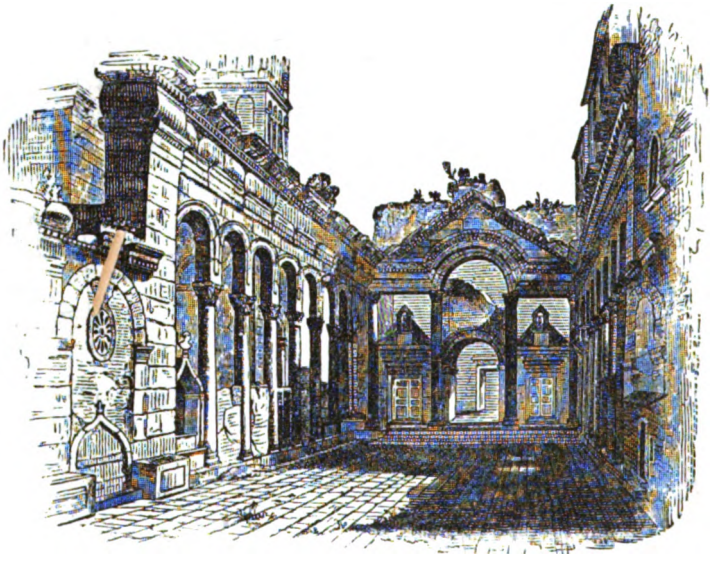


Fig. 213. View of a Portion of the Palace of Diocletian at Salona.

213). This starting of the arch directly from the capital of the column, never wholly unknown in Roman art of the later Republic and the Empire, becomes common in the third and fourth century, and in this is the beginning of Romanesque architectural art.

The Basilica of Constantine, begun by Maxentius, had its origin in the closing period of ancient art. The three mighty cylindric vaults of its northern lateral nave, as well as the remains of the piers of the southern nave, still tower up on the north side of the Forum. Between them once rose on great piers adorned with powerful columns—of which the only specimen remaining is set up in the Church of Santa Maria Maggiore—the three cross-vaults of the lofty central nave, with a span of about 80 feet, resembling those of the great halls

in the Baths of Caracalla and of Diocletian. Fragments of the vaulted roof lie all about, like huge masses of rock; but even in the midst of this devastation, the three remaining cylindrical arches, together with the apse, built on the nave at a later date, soar above the surrounding structures, and, rivaled only by the Colosseum, are conspicuous from every point of view above the far-reaching desolation of the ruined city. On the western side lay the principal apse; and opposite, at the other end, one can distinguish the entrance. The plan of the building is on a grand scale, conceived as yet in the genuine Roman spirit, vigorous in its technical conception, but somewhat careless in its execution; while the details already show unmistakable signs of deterioration. Other buildings of this period, such as the four-sided arch of Janus (*Janus quadrifons*) in the Forum Boarium, the clumsy colonnade of the Temple of Saturn on the Capitoline Hill, on the Forum side, as well as whatever is original on the Arch of Constantine, convey a still more striking impression of the decadence of architecture: a decadence which still allows of grand masses, vast in size and enduring construction, and not faulty even in proportion, but of constantly decreasing interest in detail. Interesting on account of its design and construction is another work of this closing period—the memorial monument of Constantia, the daughter of the Emperor Constantine, outside of the Porta Pia; now the church of S. Costanza.

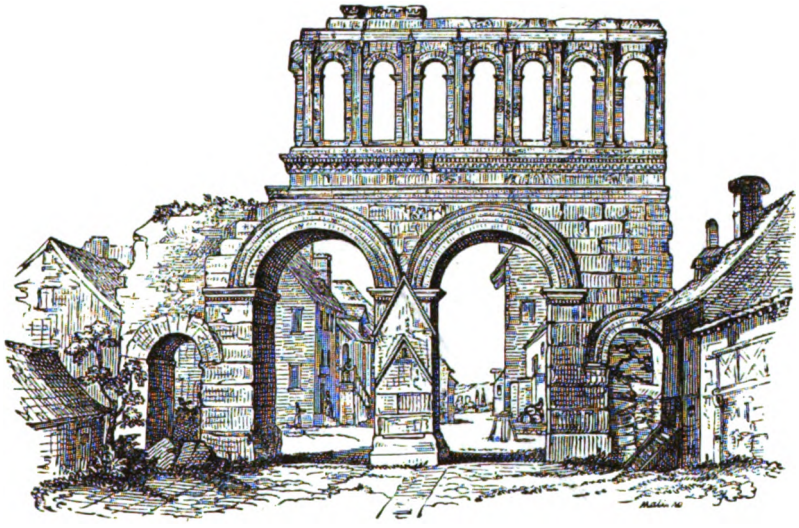


Fig. 214. Porte d'Arroux at Autun.

This is the last of the antique domed structures, and is 52 feet in diameter, encircled by a low gallery, which is separated from the main building by twelve pairs of columns, coupled by a common entablature, and connected by arches. Though the forms here are crude and misapplied, the aisle being vaulted with a continuous tunnel vault following the circle, and curiously adorned with mosaic, the ar-

Fig. 215. Porta Nigra at Treves.

rangement of the whole is of high interest, and prophetic of later development—as seen in Romanesque architecture.

We shall enumerate some of the most remarkable only of the numerous remains in all parts of the Roman dominions which date from periods later than the third century. The Porte d'Arroux, at Autun in France (Fig. 214), may be classed among the stateliest examples of Roman gateways. Its two great entrance ways are flanked

by two smaller ones; above them an open arcade with Corinthian pilasters, the whole vigorously and worthily handled. Orange in Provence is distinguished for a superb triumphal arch from the year 21

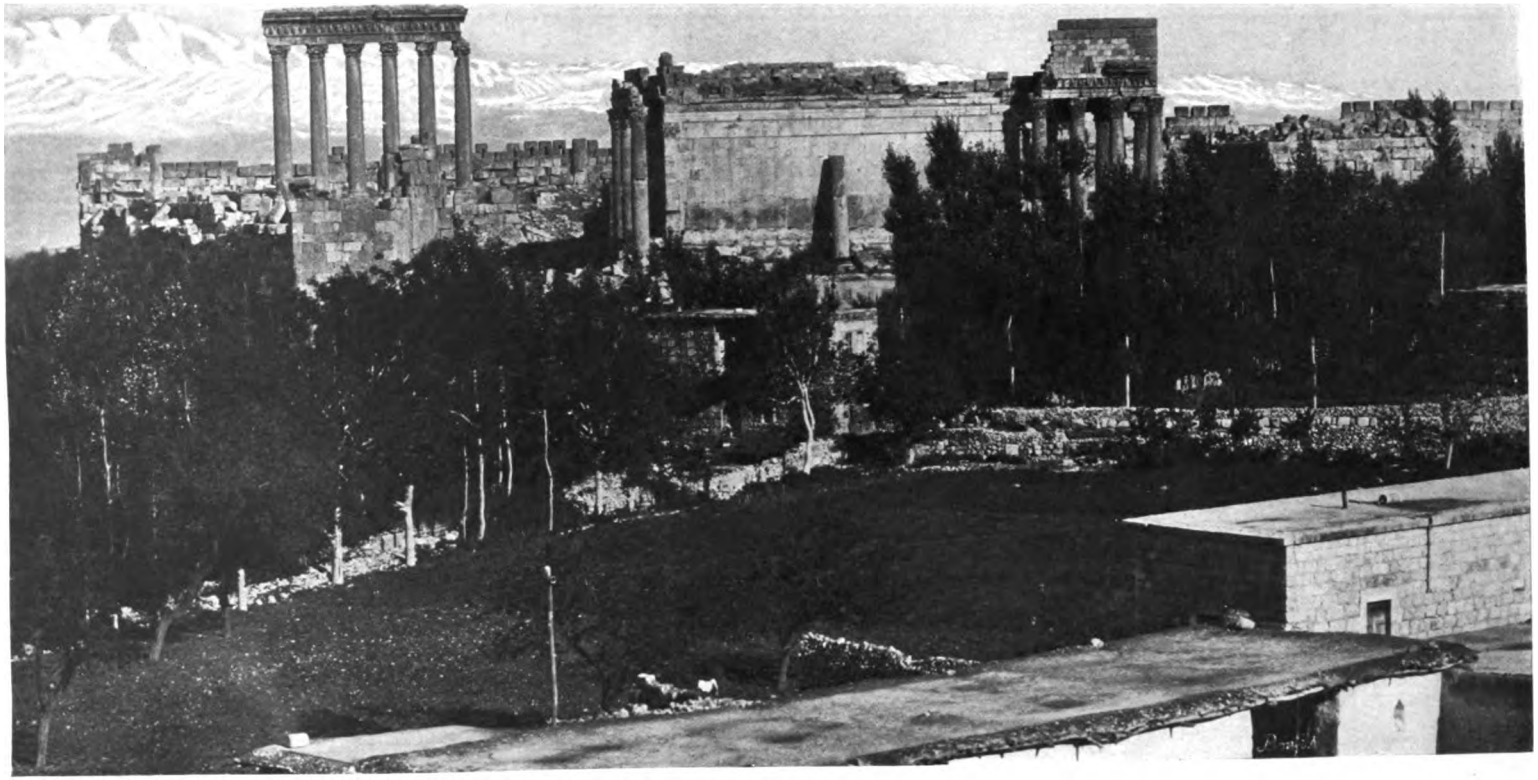
Fig. 216. Façade of Rock-cut Tomb at Petra.

A.D., and a theater admirably preserved, with the high wall of the proscenium; the only one in existence; and in Nîmes and Arles there are extensive amphitheaters. In Germany, Treves has some notable

relics of this late epoch in the basilica, the amphitheater, and the imperial palace; but if the inscription on it be any authority, the Porta Nigra in the same town (Fig. 215) must be attributed to the first or second century A.D. This is a double gateway, constructed in solid stone; both passageways being protected by projecting towers, with wall surfaces relieved by rows of pilasters and archings, showing a barbaric crudity of detail, which seems by internal evidence to assign the structure to the late Roman, if not to the Merovingian period. The neighboring town of Fliessem possesses an extensive Roman villa site; Igel, an elegant tower-shaped, richly sculptured monument of the Secundini family; Nennig, a villa remarkable for a splendid mosaic pavement; and Badenweiler, some thermæ, with their foundations still in a good state of preservation.

Of more importance than these, however, are the monuments of every description which represent the later Roman period in the East, because in them the dissolution of ancient architecture, under the influence of the fantastic Asiatic imagination, is consummated. Curved and often broken frontons, wall surfaces curved—now outward, now inward—united to the most grotesque changes in the details of construction, make up a style which may be described as the antique rococo. Extensive monuments of this kind are found in the midst of the Syrian desert, at Palmyra (Tadmor)—gorgeous works, which seem to have embodied, as if by enchantment, the splendid age of Queen Zenobia. No less important are the kindred monuments at Heliopolis (Baalbec), where an ancient cult of the sun-god called into existence countless magnificent structures; the Roman temples rising on the much earlier substructures. Even in the remote and rocky valleys of Arabia Petræa, at Petra, many varied remains of temples, theaters, mortuary monuments, and triumphal gateways bear witness to this mixture of late Roman art with Oriental fancy. All the bizarre peculiarities of this tendency are exhibited in the monumental façade which we have given under Fig. 216. In North Africa there exist the remains of cities of the Empire with often well-preserved structures. Of all the late Roman building the most interesting is that of Central Syria. Here a large number of private houses remain, so massively built in cut stone that nothing can much injure them as long as the country remains thinly inhabited. Some buildings of the third and fourth centuries remain, which were evidently built for public purposes, and the earliest churches of Christianity are there, in recognizable shape. The rapid changing of the classical forms and the formation and development of Romanesque building are well seen.

The temples of Baalbek (Heliopolis) in Syria. The nearer one is the Temple of Jupiter or of the Sun, a building which had a complete peristyle of columns, one of which is seen leaning against the cella-wall. The six standing columns in the distance are those of the great temple; the massive stone structures which are seen to stretch across the whole picture from left to right, are the sub-structures of that temple and its great forecourt; they are all Roman work of late time (second century A.D.), *but based upon earlier foundations.*



BAALBEK

GENERAL VIEW OF THE ACROPOLIS

3. *Sculpture Among the Romans.*

With the subjugation of Greece by the Romans, the national life of the Greeks had ceased, and with it had been extinguished the last spark of that loftiest inspiration which had created the ideal forms of an earlier period of art. But this revolution was insufficient to annihilate the inborn plastic talent of the Hellenic race; on the contrary, the Romans' newly awakened love for art aroused the slumbering art nature of the Greeks to new life, and gave them abundance of opportunity and stimulus for work—as has been pointed out in the chapter on Greek sculpture. It is true that this taste on the part of the Romans was founded, primarily, upon a passion for splendor among the wealthier classes, who craved the productions of the sculptor's art for mere enjoyment and for the adornment of a refined life; but never has luxury been practiced in greater perfection, or on a grander scale.

The tendency of sculpture corresponded to these outward conditions. New conceptions were no longer possible in the ideal realm of Hellenistic art, neither could essentially new creations be looked for; but a free reproduction of famous older works of the period of glory, a taking up again of the broken thread, was yet possible. And so we witness the rise of a new Attic school of sculptors in Rome, or working for Rome, whose works attain a perfection which it seems as though nothing could ever surpass. There are a delicacy of conception, a harmony of rhythmical movement and handling of lines, a melting softness, a tender transition of forms, and a complete mastery of technicalities, which, taken collectively, have made these works the objects of depeest admiration. Only since the works of true Hellenic art of the best periods became known in the course of the nineteenth century, has it been realized that these last, in addition to all those excellences, are instinct with an utterly unconscious *naïveté* and modesty, a loftiness and purity of imagination, beside which the later performances, with their conscious striving after effect, appear like cold reflections.

Apart from the finds at Herculaneum, and a few very recent discoveries, nearly all the famous statues in the museums of the Vatican, the Capitol, and the Palace of the Conservators at Rome, in the Uffizi at Florence, and in the museum at Naples, are examples of copied or modified Greek sculpture. Among the great accumulations of these works we can call attention to the most important only, some of which have been named above; see chapter on Greek sculpture. The Medicean Venus in the Uffizi; the Farnese Hercules at Naples; the Apollo

Citharœdos, the Ariadne, the Cnidian Aphrodite, perhaps the Belvedere Apollo, and that statue near it, in the Belvedere of the Vatican which has been called the Belvedere Antinous, or Hermes—these last-named sculptures being at Rome; the two important statues in the Louvre; the so-called Borghese Gladiator, and the Diana of Versailles, are all of this series (Fig. 217). It will probably be forever unknown whether these or any of them are faithful copies of the original work of the Greek sculptor. Some of them may even be the originals themselves. But the dividing line between the Græco-Roman sculpture of the first century A.D. and the pure though late Hellenic sculp-

Fig. 217. Ariadne. Vatican Museum.

ture is difficult to fix. On the other hand, there are some pieces which are less Greek than Roman. Thus, the fine recumbent statue of the Nile surrounded by children, which are supposed to represent each a cubit in the rise of the river in the years of great flood, may well be a creation of the Roman epoch (Fig. 218). It is only within the closing years of the nineteenth century that attention was called to the reliefs, which, partly in Rome and partly in Florence, may be almost certainly identified with the altar of Peace mentioned above in the section concerning Roman architecture. This work assuredly belonged to the reign of Augustus. In the Museo delle Terme or Museum of the Baths of Diocletian, at Rome, are several bas-reliefs executed in marble in the most delicate and refined style: not Greek, and yet comparable with Greek work for subtlety and refinement,

while even more descriptive in a sense—that is to say, more realistic in the way of gesture and pose and what seems like portraiture. In Florence there are others, these last containing in low relief a magnificently conceived procession of robed men and women mingled with children in considerable numbers, and thought to represent the passing before the altar of the whole imperial family and its connections; perhaps also the nobles of Rome, the members of the gradually forming court of Augustus. Nothing more interesting than the comparison inevitably suggesting itself between this and the cella frieze of the Parthenon can be found.*

There was a pause in the development of Roman sculpture which is not easy to account for, as the common ascription of it to the lack of

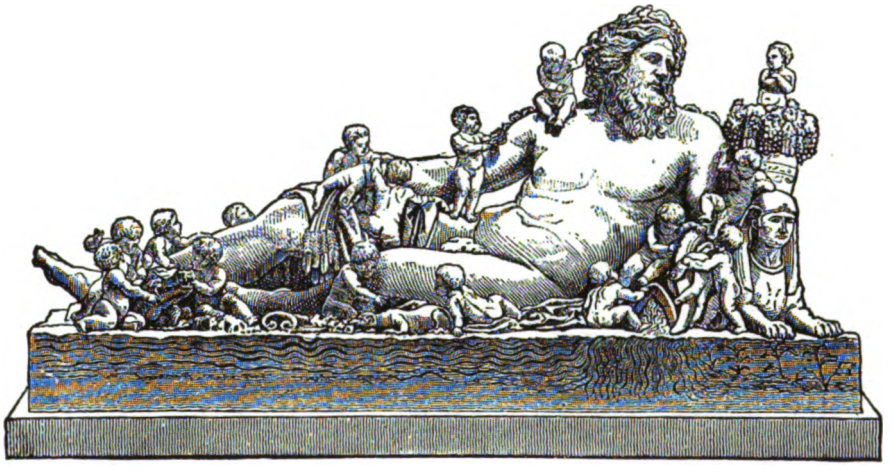


Fig. 218. Nile Surrounded by Children.

interest shown in art by the Flavian emperors seems insufficient. But under Trajan some magnificent work was done, apparently in connection with his vast architectural undertakings—the famous Forum and Basilica, and the Temple and Column erected by his successor in honor of that greatest of the emperors. These sculptures are to be found partly built into the Arch of Constantine in Rome, and partly preserved in the Lateran Museum. They show a natural and wholesome development from the Augustan art described above; the work is even more stately and dignified, the true Roman "senatorial" dignity appearing in the figures, which yet seem to be portraits—so far, at least, as the Emperor himself and his immediate followers are concerned. Some of the bas-reliefs in the arch are vigorous scenes of

* See Wickhoff, "Roman Art"; London, 1900. The text is translated from a publication of the Austrian imperial government, "Die Wiener Genesis."

battle and flight. His successor, Hadrian, carried to completion the Temple of Trajan and the famous Column, and in the sculptures of these columns, which will be described more fully below, there appears for the first time, in the work of the city itself, a certain curious rudeness which has been found to mark the provincial work of even the Augustan age. The story of the Dacian war is well told in bold and freely designed sculpture; but this sculpture is not in itself refined; it is not charming in an artistic sense; it is in fact spirited and instructive illustration—but plastic art in the highest sense it is not.

A new impulse was given to idealistic sculpture by Hadrian, whose predilection for all that was Greek gave manifold occasion for the

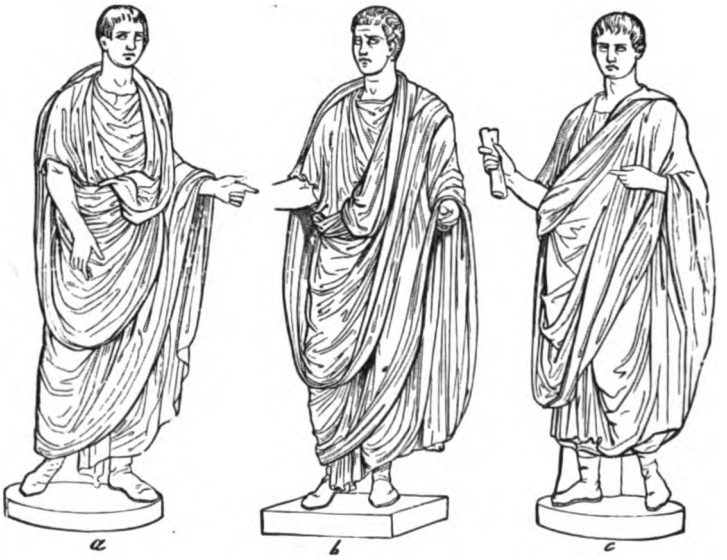


Fig. 219. Roman Portrait Statues with the Toga (*Togatæ*).

copying of antique productions, including those of the more severely classical style; thus developing by exercise a large amount of imitative talent. These works are invariably distinguished by rare, peculiar delicacy of form; but their treatment of subject aims at a polish which degenerates into soullessness, and noticeably falls short of the vivacity of earlier efforts. Numerous statues of this type are scattered through the various museums of Europe. Among the most interesting is the Pallas of Velletri, in the Museum of the Louvre, grandly conceived and severe in design, but insipid in execution. But even at this late epoch ancient sculpture produced a new ideal form, that of the Antinous, which occurs many times, and often represented with a high degree of artistic perfection. Antinous was a beautiful youth,

who drowned himself in the deep waters of the Nile as a mysterious propitiatory sacrifice for his master, the Emperor Hadrian. The Emperor honored his memory by founding a city called Antinoë, and by setting up countless images of the favorite, which idealized him in every conceivable way; though all were characterized by an expression of thoughtful melancholy in the drooping head, by brows overshadowed with clustering curls, and by a suggestion of sadness in the curve of the voluptuous mouth. Specimens may be seen in the Vatican and in the Lateran at Rome.

Fig. 220. The Pudicitia (Modesty). Vatican Museum.

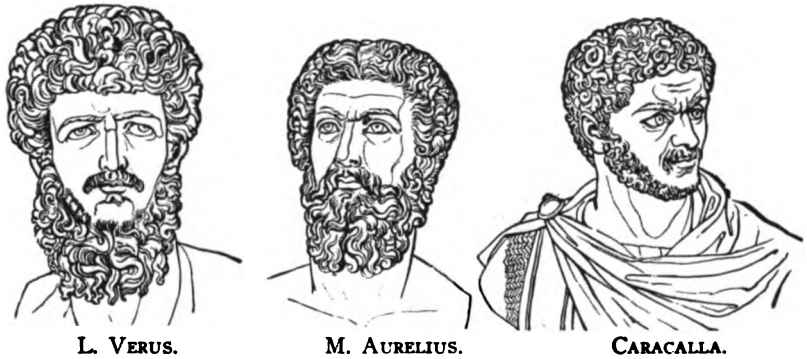
Although the stamp of Greek art may be unmistakably recognized in all these works, another branch of sculpture has its germ primarily in Roman manners and the Roman habits of thought; viz., portraiture. This is closely connected with the importance which the Roman mind attached to the individual citizen with his aggregate peculiarities. The tendency toward the preservation of particular likenesses was long before apparent in the old-time custom of setting up ancestral images (*imagines*), to which a special apartment was assigned in the dwelling of every noble family, a privilege distinguishing the patrician from the plebeian. These likenesses were molded in wax, and doubtless were more admirable in the matter of outward resemblance to the original than in lofty artistic perception; but with the growth of Hellenistic sculpture it came to be the custom in Rome to use the nobler materials of marble, and even of bronze, in the execution of these portraits. In this matter the Roman custom again differs sharply from the Greek. While Hellenistic art idealized the individual form, and only made such use of drapery, even in the airy disposition of it about the figure, as seemed to be demanded for the interpretation of characteristics, the Romans started with the idea of representing the individual appearance with the utmost exactness, either in the voluminous drapery of peace, the toga, or in complete warlike paraphernalia; hence the portrait statues are distinguished as *togatæ* (Fig. 219) and *thoracatæ* (Fig. 221). As the Roman style of dress is altogether heavier and more ungainly than the Greek, a more substantial, realistic expression, consistent with its other characteristics, is given to such work in consequence of this

habit of exact reproduction. But with the invasion of the manners of Greece her costumes likewise became fashionable among the Romans; and from that time began an idealistic treatment of portraiture. From that time the fashion of representing the emperors under the form of Jupiter or other divinities came into vogue; while their consorts

Fig. 221. Marble Statue of Augustus. Vatican Museum.

were delineated with the attributes of Juno or Venus. But quite apart from such idealization, the female portraits of this school were most successful; and one is frequently impressed by the matronly dignity, the grace and loveliness of the true womanly type, in the grave, nobly draped figures, sitting or standing, in the dainty though somewhat studied Greek garb.

The two seated statues of Agrippina, wife of Germanicus, preserved in the Museum at Naples and the Capitoline Museum at Rome, are of great beauty; and not less so are the figures, also seated, of the so-called Women of Herculaneum in the Dresden Museum—noble women, in whom an incomparable grace is equaled only by a womanly dignity and patrician bearing. To this class belongs also the statue called the Pudicitia in the Vatican (Fig. 220)—an embodiment of most attractive, chaste womanliness, combined with a high perfection in the treatment of the drapery. Among the male statues of this kind may be mentioned the marble statue of Augustus (Fig. 221), found in the year 1863 near Prima Porta, not far from Rome, and unsurpassed for the nobleness of its conception and the delicacy of its artistic execution, besides being in an excellent state of preserva-



L. VERUS. M. AURELIUS. CARACALLA.

Fig. 222. Busts of Roman Emperors.

tion. The two marble equestrian statues of M. Nonius Balbus and his son, found in Herculaneum, betray the same sort of excellence, and to a like degree a touch of Greek idealism, being full of refinement and polished distinction, and are probably productions of the Augustan epoch. Much less interesting, but still to be commended for a simple naturalness of finish and careful carrying-out of detail, is the equestrian statue of Marcus Aurelius, a gilded bronze, which at present adorns the Piazza del Campidoglio in Rome. The vigorous stepping of the horse, the tranquil pose of the rider, who stretches out his right hand reassuringly, are well and strikingly expressed.

The multitude of statues and busts of the emperors and their relatives, as well as of other illustrious Romans of both sexes, is almost innumerable; but in none of them did the idealistic conception by any means do away with the distinct individual presentment, which appealed, after all, more strongly to the Roman mind. The character of the personality is, for the most part, delicately and accurately fixed

with unrivaled vivacity; so that the critical inspection of, for instance, the large collection of portrait busts in the Capitoline Museum is of high interest in a psychological point of view; one of the most complete sets of plastic illustrations to Roman history being here preserved to us (compare Fig. 222). Side by side with works displaying skillful, even masterly handling, we find many inferior productions. Many innovations were thus made in the course of time, such as the employment of precious colored marble for busts, so that the head and neck alone are in white, the drapery of the shoulders being carved in a lovely veined and clouded stone. Such an innovation is seen in the faithful copying of the fantastic headdress of the Roman ladies.

With plastic portraiture historical representation went hand in

Fig. 223. Portion of Relief on Trajan's Column.

hand, and the diligent cultivation of this branch of art found an independent school in Roman sculpture. The intense realism of the Romans is here preserved in full force; for, far removed from the high ideality with which Hellenic art conceived of even historic occurrences, the Romans aimed at the most accurate delineation of the actual, bringing out into bold relief the warlike enterprises, the battles, victories, and triumphs of the Imperator. Roman sculpture tells its story as fully and plainly as does the Oriental; but a touch of Greek beauty informs it, and dowers it with life and variety. It was necessary in this case, also, to glorify the individual; and the design and execution of the whole are regulated with this view. The necessity of grouping, for the most part, in as limited a space as was consistent with reality, a large number of figures, led to an arrangement of the relievo which is widely removed from the fine and polished

treatment of Hellenic art. Sculpture loses itself in the realm of painting, when, taking a varied background, it arranges its figures on different planes by gradations of modeling: those in the foreground often standing out completely from the surface, and thus retaining that substantial form which appeared so essential to the Roman conception; while the remaining figures appear crowded together.

The reliefs on the Arch of Titus in Rome belong to the earliest and most important works of this kind. On the inner wall, at the

Fig. 224. Portion of Relief on Trajan's Column.

side, one sees the Imperator, crowned by a Victory, led by Rome, solemnly entering his triumphal arch in his chariot drawn by four horses; while on the other side the precious spoils of the Temple at Jerusalem, among them the Seven-branched Candlestick, are being borne along. The triumphal sacrifice is portrayed upon the somewhat diminutive relief of the outer frieze. A fresh, strong life, free movement, and noble dignity characterize this work.

The peculiar Roman manner shows itself still more decidedly in the historical relievos on the various monuments of Trajan, especially in the numerous remains of Trajan's Arch, which were worked into

the Triumphal Arch of Constantine; in the reliefs of the attica; the statues of Dacian prisoners on the postament, above the columns; the medallions above the side entrances; and the reliefs on the two outer ends and the inside walls of the archway. These last are most life-like delineations of the battles of the Emperor against the Dacians and the Parthians; while the first commemorate the procession that celebrated the triumph over these conquered peoples, as well as other public actions; and the medallions present scenes from the private life of the Emperor, such as sacrificial and hunting scenes. Very important in this connection are the continuous reliefs, wound like a

Fig. 225. Apotheosis of Antoninus Pius and his Empress. Relief from the Base of the Column of Antoninus Pius.

spiral ribbon—most unfavorably for purposes of observation—from the base to the summit of Trajan's Column, and containing an inexhaustibly rich delineation of the Emperor's warlike deeds against the Dacians (Figs. 223, 224). The various incidents of a campaign are here depicted, everywhere with singular life and accuracy: fight and repulse, passionate combat and humiliating overthrow, all have one purpose of characteristic expression; and, though no element of loftier idealism makes itself felt, the truth and force and the historic reality of the embodiment hold one spell-bound.

Some valuable remains have also been preserved from the reign of Antoninus Pius; as, for instance, two reliefs from a triumphal arch of this emperor, at present in the Palazzo del Conservatore at the Capitol. One commemorates the dedication of the temple to Faus-

tina, the colonnades of which still exist; the other the apotheosis of the empress, who is borne upward, out of the flames of the funeral pyre, by the goddess of victory. Akin to these are the reliefs on a postament now set up in the garden of the Vatican (Giardino della Pigna), which formerly belonged to a column of Antoninus Pius, raised to the memory of the deceased Emperor A.D. 161. In front, the apotheosis of the emperor and his spouse is represented, idealized, and with delicately executed figures, but cold and stiff, like most allegorical works (Fig. 225). On the two other sides are processions of galloping horsemen in lively movement, but wildly and irregularly grouped, without regard to architectural symmetry—a suggestive symptom of incipient decay.

The power of simple and forcible historic representation was reawakened under the dominion of Marcus Aurelius, as is apparent from a retrospective glance at the monuments of the time of Trajan;

Fig. 226. Relief from the Arch of Constantine.

though these latter are scarcely equaled in energy, and fresh, abounding vitality. The reliefs on the Emperor's monumental column, delineations of his wars with the Marcomanni and the Quadi, bear witness to a simple, healthy tone; likewise the four great reliefs in the stairway hall of the Palazzo del Conservatore at Rome, which also belong to a memorial monument in honor of this Emperor, and exhibit a clear, free, skillful treatment.

The predestined decadence in the historical sculpture of the Romans shows itself in the relief on the Arch of Septimius Severus (A.D. 203), which not only disdains all architectural rules in its wild, irregular divisions, but leaves a disagreeable impression by its entire treatment, which is dry and spiritless. Complete decay is proclaimed by those reliefs on the Arch of Constantine, which actually belong to his age, and come down to use in all their stiff ugliness, lifeless and spiritless, showing no knowledge of the human body, and being even at times barbaric in their crudeness (Fig. 226).

A remarkable and particularly numerous class of monuments,

which in more than one respect enlarge the scope of Roman sculpture, have not yet been alluded to; I refer to the sarcophagus reliefs. The custom of burying, instead of burning, the dead, never quite died out in ancient times, but became a universal rule only during the reign of the Antonines. The employment and artistic construction of sarcophagi, or stone coffins, is, of course, connected with this fact; and therefore they belong, almost without exception, to the period of decadence already set in (see Fig. 227). Moreover, we recognize in them for the most part, work of tradesmen, and they seem to have been kept in stock at the workshops, and display frequent repetitions of the same composition. Nevertheless these monuments arouse a deep interest, because a quantity of antique compositions of an earlier period are reproduced upon them. With a few exceptions, when incidents of real life are represented, the outsides of these sarcophagi are adorned

Fig. 227. Sarcophagus in the Capitoline Museum.

with an infinite variety of scenes illustrative of the ancient myths of gods and heroes. Occasionally the interest of the subject chosen is the only reason for that choice, as in some favorite objects of this kind, such as the scenes from the life of Achilles on the superb great sarcophagus in the Museum of the Capitol, or the frequently recurring battles of the Amazons. As a rule, however, such myths are employed as either contain or suggest a thought which bears upon death, separation, and reunion. Thus we often find presentations of the Rape of Proserpine, of the Return of Alcestis or Protesilaus from Hades; and symbols of the hope of reunion with those separated by death; and, furthermore, the profoundly thoughtful myths of Amor and Psyche, of Prometheus, of Luna and Endymion, or scenes from the Bacchic myths, which allowed of various symbolic interpretations, and many others. The artistic merit of these productions is usually of an inferior order, the grouping often confused and crowded, the drawing unskillful, the treatment of the forms of the body defective, the execution insipid, angular, and hard; but, on the

other hand, they are not lacking in a wealth of surprisingly beautiful and spirited motives, which suggest originals belonging to the best time of antiquity, and reflect for us, in a manner, many a lost work of noblest art. Besides these, a small number of such productions, even judging by their execution, must be relegated, most undoubtedly, to a better epoch.

Among the lesser arts, the cutting of precious stones was carried to a high degree of perfection by the splendor-loving Romans. In the time of Augustus, the Greek master Dioscorides enjoyed the highest reputation in the exercise of this profession. The two most famous and magnificent cameos, now extant, which in size and richness of workmanship surpass all others, are attributed to the best period of the art. One of them, in the Imperial Collection at Vienna —a sardonyx, of the astonishing size of nine inches wide by eight inches high—exhibits a richly executed allegorical glorification of Augustus, who appears as Jupiter enthroned beside Rome personified. Very similar is the design on the second stone, preserved in the cabinet of the National Library at Paris, except that it even excels the first in size and splendor. It measures thirteen inches in height, and eleven inches in width, and is cut from a splendid sardonyx having several strata of different colors. The same love of elegance among the Romans was the incentive to the creation of wonderful fabrics in many-colored glassware. The most celebrated work of this kind is the Portland Vase in the British Museum at London—a superb work in deep blue glass, ten inches in height, with an upper layer of white glass, upon which figures are cut, showing white on a blue ground. This work is of the nature of cameo cutting in a material artificially made instead of being naturally found in colored layers. A still more beautiful vase of the same kind, though somewhat smaller, is in the Naples Museum.

4. *Painting Among the Romans.*

Painting, as well as the other arts, was transmitted to the Romans from the Greeks; and we have already, in our review of Hellenistic art, made mention of the masters, who, up to the time of Hadrian, bear witness to a brilliant after-blossoming of this branch of antique art. It is a noticeable fact, however, that while among the sculptors of this era scarcely a Roman name occurs, there is no lack of Romans who are prominent as painters. When we consider that the art of painting flourished even among the Etruscans, it is entirely probable that the Italian nations may have had a decided talent in this direction. In the days of the republic, as far back as 300 B.C., Fabius

Pictor painted the Temple of Salus; and the poet Pacuvius (200 B.C.) seems to have done the same kind of work. Ludius was especially famous in the time of Augustus, not to mention other Roman names. But, as we know was the case with the works of the last-named painter, these productions must have been, for the most part, of a decorative nature; for the works of a higher order emanated invariably from Greek hands, and the Romans themselves conceded the first rank to the Hellenes. Portrait painting was specially popular;

Fig. 228. Cupid's Nest. (Wall-Painting from Pompeii.)

and even toward the end of the republic there was a certain woman-artist, Lala (properly *Laia*) of Cyzicus, who had made herself a great name in her profession.

The discovery and excavation of Pompeii and Herculaneum, the exploration of the Baths of Titus and of many subterranean tombs in the neighborhood of Rome, have brought to light numerous illustrations of an important branch of Roman painting; and the museum at Naples is a repository of the finest and most valuable specimens. The pictures from Pompeii belong, as do the buildings of this and the neighboring towns themselves, to an interesting transition from Hel-

lenic to Roman art, and may frequently be copies of old Grecian masterpieces, as is the case with the sculpture of the same epoch. They are executed on a dry ground in distemper, on a foundation of extraordinarily fine, smooth plaster. The symmetry of the whole witnesses to the predominance of a strict architectural arrangement. The wall surfaces are painted with a solid background, usually of a deep, warm red or a soft, subdued yellow; though occasionally, but

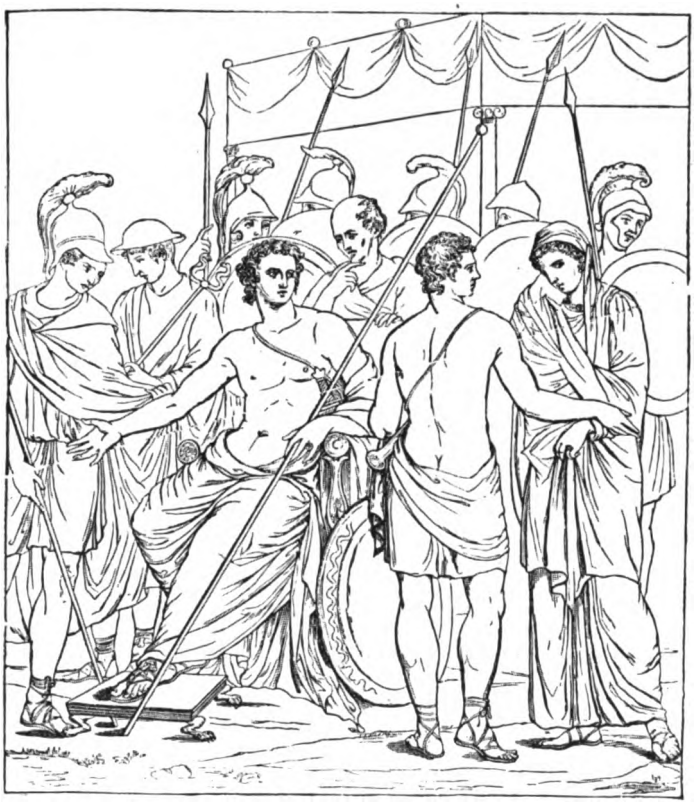


Fig. 229. The Parting of Achilles and Briseis. (Wall-Painting from Pompeii.)

much more rarely, black, blue, green, or purple, are used. A band of a different, darker color, is usually carried like a dado around the base of the wall; and sometimes the upper part of the wall is divided from the rest by a similar stripe, in the manner of a frieze. The central space, so bordered, is adorned by disconnected, airy figures, dancing-girls, genii, and the like, or else by complete pictures of some given subject. Incidents out of real life are very seldom taken as subjects for representation; but, when so employed, the result is often

charming, uniting a high order of beauty with graceful dignity. The figures are more frequently suggested by the world of fable, the Bacchic and other myths, centaurs and centauresses, bacchantes, satyrs, and similar creatures; the most important among these productions presenting scenes from the heroic legends or myths. There is, for example, the Sacrifice of Iphigenia, the Death of Patroclus, the Reunion of Ulysses and Eumæus, the Anger of Achilles, the Education of Achilles by Chiron, the Recognition of Orestes by Iphigenia, the Parting of Achilles from Briseis (Fig. 229), the Deliverance of Andromeda by Perseus, the Victory of Theseus over the Minotaur,

Fig. 230. Genre Subject. (Wall-Painting from Pompeii.)

etc.; in short, all the joyous, beautiful world of the antique legends and myths lives again before our eyes in all the glow and glory of lovely hues.

In this respect the representations of cupids, who are introduced in graceful pleasantry and sportive play, are especially popular. A wall-painting discovered at Pompeii, on which a young girl is showing an entire nest of little cupids to her playmates who are looking on curiously (Fig. 228), is especially charming. These winged messengers of love are often depicted in merry playfulness, like that little one sitting upon a portly langouste or crayfish, and preparing to fish (Fig. 230).

The coloring is bright and soft, now in warmer, now in cooler tints, the modeling sometimes only slightly suggested, sometimes carried out with greater precision; while in other respects the technical

treatment, as well as the spirit, value, and character of the composition vary greatly. But the invariable result is cheerily suggestive of a gay, charming existence of pleasurable ease.

This cheerful character of the whole is still further and more decidedly augmented by the frequent harmless, merry, and naïve genre pictures (Fig. 230), by landscapes carelessly introduced, by bits of still life, fruit, and animals; and, furthermore, by an imitation of architecture, painted in perspective, and built up with slender, delicate members; all this being nothing more than elegant trifling, and not done with any deliberate idea of illusion.

Essentially different from the character of these productions is an extended picture in mosaic, which once adorned the pavement in the so-called House of the Faun, and which is described above under Greek painting.

In Rome, the Aldobrandini Marriage in the Vatican, a wall-painting full of tender, spiritual grace, must be placed in the same category with the Pompeian works, by virtue of its light, clear execution. Many other such productions, some very lovely, are found in tombs in the environs. When the so-called ancestral house of Tiberius was excavated on the Palatine (in 1869), wall-paintings of rare excellence were discovered, such as light decorative works connected with pictures of independent meaning, ideal scenes, genre pictures, and ornamental subjects; as, for instance, wreaths of foliage of wonderful delicacy, and replete with artistic charm. On the other hand, we find the extensive mosaics from the Baths of Caracalla, which now form the pavement of a great hall in the Lateran, crude representations of gladiators, common in subject, and clumsy in technical detail. Of this class are the wild beast and gladiator combats in the principal hall of the Villa Borghese. To the most exquisite pavement mosaics belong those of Nennig and of Vilbel, the last in the museum at Darmstadt, which also contains the expressive Orpheus of Rottweil.

APPENDIX.

ARTISTIC HANDICRAFTS AMONG THE ANCIENTS.

IN order to gain a more complete idea of the artistic endowments of the peoples of classic antiquity, we will, in closing, cast a glance at the productions of those industrial handicrafts which border, as it were, upon the realm of creative art. All epochs of a healthy art life, developing itself without restraint from the national genius, agree in the fact that handicraft is indissolubly bound up with art; so that the latter is developed upon the solid technical basis of the former, to which it continually lends a nobler stamp, a higher consecration. But this union never attained to such perfection as with the Greeks. Had all the productions of their architecture, sculpture, and painting vanished, leaving no trace behind, the evidence given us by the utensils and household vessels, articles of ornament, and equipment of all kinds—found chiefly in the tombs, but likewise in the dwellings of Pompeii, would alone convince us of the incomparably fine artistic feeling of this highly gifted people. The important fact that in the speech of the Hellenes the same word, *techne,* is employed to express the activity and skill of the artist as of the handicraftsman, is in itself a proof of the intimate mutual relationship between them.

The Etrûscans also shared in this gift for artistic workmanship; and their work in terra-cotta and brass, as well as their manipulation of the precious metals, was highly esteemed. We have already given specimens of it in the superb bronze mirrors with engraved designs (Fig. 198). The Romans at last fell heirs to a rich double legacy from both peoples, and were able not only to adorn their daily life with the creations of an earlier time, but to turn to account the talent of Grecian workmen for their own uses. The period following the end of the republic developed among them a luxury which, continually increasing under the emperors, attained to its most gorgeous culmination in the time of Hadrian. No era of history can rival the solidity and the noble type of that Roman splendor which constantly absorbed new life and freshness from the well-springs of the Grecian sense of beauty. Without even desiring to attempt a sketch of the history of ancient artistic handicrafts, we will content ourselves with hints as to their characteristics.

The dominant trait in the life of all classic antiquity was the desire to make all outward existence inhale beauty, as it were, with the air. The poorest household utensils, the most insignificant articles of daily

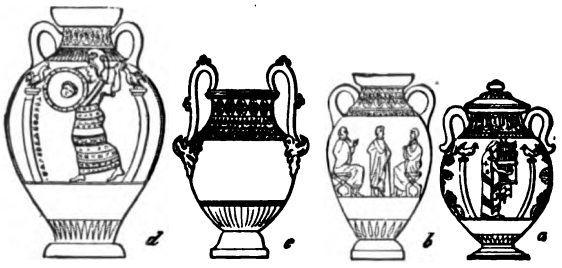


Fig. 231. Greek Prize-Vases.

use, give as clear proof of this real artistic instinct as the sublime creations of monumental art. Thence may be traced the origin of the plain law, everywhere apparent, that perfect fitness in union with a sense of ideal beauty should govern all modifications of form. Let us begin with the simplest—with the vessels and utensils, made of burnt clay, for the kitchen, the storeroom, and the every-day family table. A rhythmic undulation of outline, a perfectly clear and appropriate construction of parts, and a finely defined individuality, express, in all cases, the purpose and the use of the utensil. The shapes of the different vessels are as infinitely various as the Greek language is wonderfully rich in designations for them. It is a pure artistic delight for the eye to trace in the collections these hundred-fold varia-

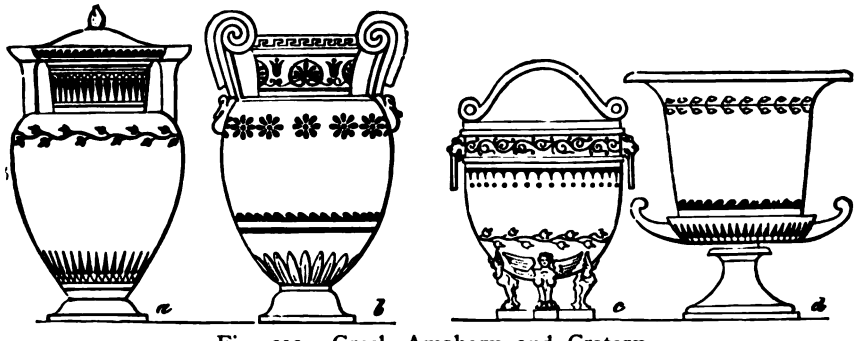


Fig. 232. Greek Amphoræ and Crateræ.

tions in the harmoniously undulating outlines. Eurythmia—a complete beauty of accurate and well-proportioned action—is the foundation law here, as in all Greek work.

But disproportionate interest is always felt in those objects upon which greater artistic elaboration has been lavished, and which were

intended for the use of the rich, or for gifts on festive occasions. To this class belong the precious vases which were intended as prizes for the victors in the Pan-Athenian games, and were remarkable for beautiful shape, felicitous adjustment of parts, and noble artistic decoration (Fig. 231, *a, b, c, d*); here, also, the graceful hydrias, receptacles for water at the fountain, favorite wedding-presents for a bride; here the capacious two-handled amphoræ for holding liquids (Fig. 232, *a, b*); here, especially, the great mixing-vessels (*crateræ*), in which, before the meal, the wine was mixed with water, and then cooled, and which play so important a part in the surroundings of the Homeric heroes (Fig. 232, *c, d*). Such vessels were by no means confined to clay, but were often fashioned in metal, sometimes even

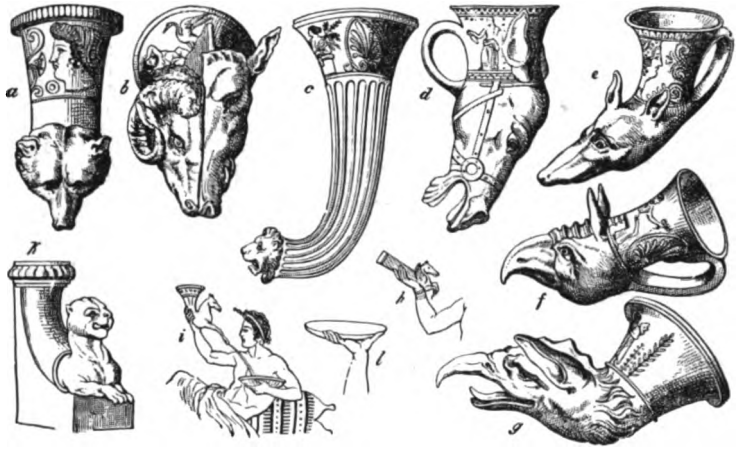


Fig. 233. Greek Drinking-Horns.

in silver, gold, or electrum; for the most famous masters of the great art of sculpture not unfrequently delighted in turning their hands to such works of elegant skill. Splendid specimens of the best Greek style—sometimes in clay, with painted and gilded relievos; sometimes wrought in silver, and even in gold—have been discovered in the mound sepulchers of the Crimea, and placed in the museum at St. Petersburg. We have already given examples of the style and order of painting which adorned the greater proportion of the antique vases and utensils. To a special class, great favorites with the ancient artisans, appertained the drinking-horns (Fig. 233), sculpture vying with painting to endow them with beauty: the last adorning the rim with figurative representations; the first with an inventive genius which was simply inexhaustible—often transforming the points of the horns into heads of animals. We find the heads of a fox or a dog

(*a*), a greyhound (*e*), a mule (*d*), a horse (*i*), a hanged horse (*h*), a griffin (*f, g*), a panther (*k*), a lion (*c*); and even humorous combinations of two diverse half-heads of animals, like the sheep and boar (*b*), are of frequent occurrence.

Occasionally molding in clay rises to the rank of artistic creation in certain small, single objects intended as useful ornaments, as well as in little figures and groups. Of this description are the charming little figures, about a span long, found in Bœotian tombs at Tanagra, and those of similar character found near Smyrna, and in smaller

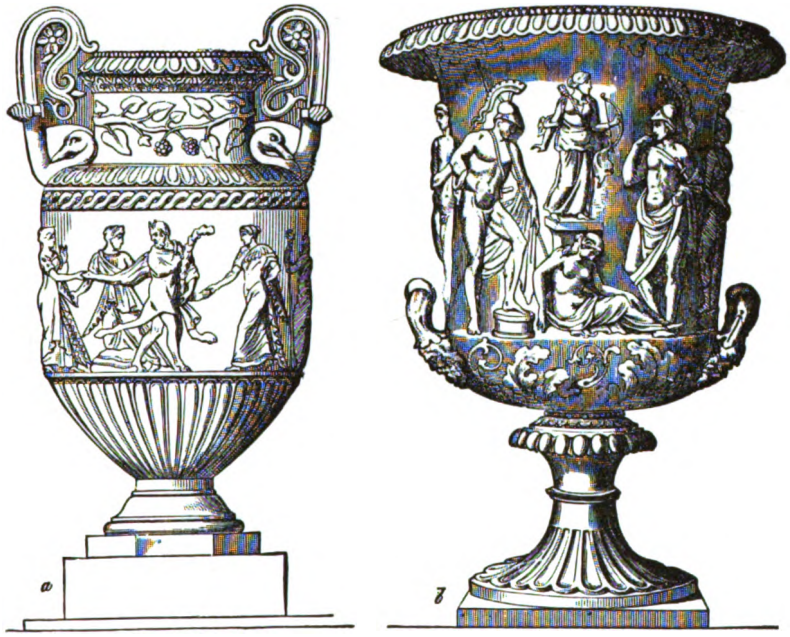


Fig. 234. Roman Marble Vases.

quantities in many of the Eastern Mediterranean lands.* Most of them are genre figures—as, for instance, that of a young girl who is caressing a bird sitting on her shoulder—or some other representation of a pleasant, cheerful, humorous, and simple kind; exquisite productions, admirable not only for perfect loveliness of form, but for the charming effect of color, given not only to the drapery, but also to the undraped portions, especially the tiny head, by painting the whole, and affording us, owing to the unusual state of preservation in

* R. Kekulé, "Griechische Thonfiguren aus Tanagra"; Stuttgart, 1877. A work of exceptional beauty. See also the *Gazette Archéologique*, January, 1877; Paris. Also *Gazette des Beaux-Arts*, 1875, April, May, June. A collection of these terra-cotta figures is in the possession of the Boston Museum of the Fine Arts.

which they were found, a most unexpected specimen of the effect of antique polychrome in works of sculpture (Fig. 235).

Luxury in the construction of vessels for use and ornament, by the employment of precious material of all kinds, reached the highest point with the Romans. Vessels of gold and silver, others of precious stones cut and mounted in gold, vied with chalices of onyx

Fig. 235. Terra-Cotta Figure from Tanagra.

and agate, with costly glass goblets, with the famous Murrhenian vases, and last, not least, with those superb great crateræ of alabaster, marble, granite, and porphyry—made valuable partly by the difficulty of their mechanical execution, partly by their decoration with symbolical reliefs—and rising, by reason of their sculpturesque treatment, to the importance of original works of art (Fig. 234). We have fine specimens of noble richness and highly imaginative artistic decoration of vessels in metal discovered at Hildesheim, and now in the museum at Berlin.

In this class of articles should be included the beautiful bronze tripods, together with their accompanying censers (Fig. 236), which

were remarkable for noble form and artistic ornament; but above all the numerous candelabra, the largest collection of which, taken from Pompeii and Herculaneum, is preserved in the museum at Naples. Those among them which are of less finished execution may be distinguished as the work of Italian artisans; they are dull and monotonous in organization, or give evidence of a tendency toward Etruscan taste in the somewhat arbitrary introduction of little human figures climbing and sitting, or of all sorts of little animals. We see in others, on the other hand (Fig. 237, *b, d, e*), the systematic con-

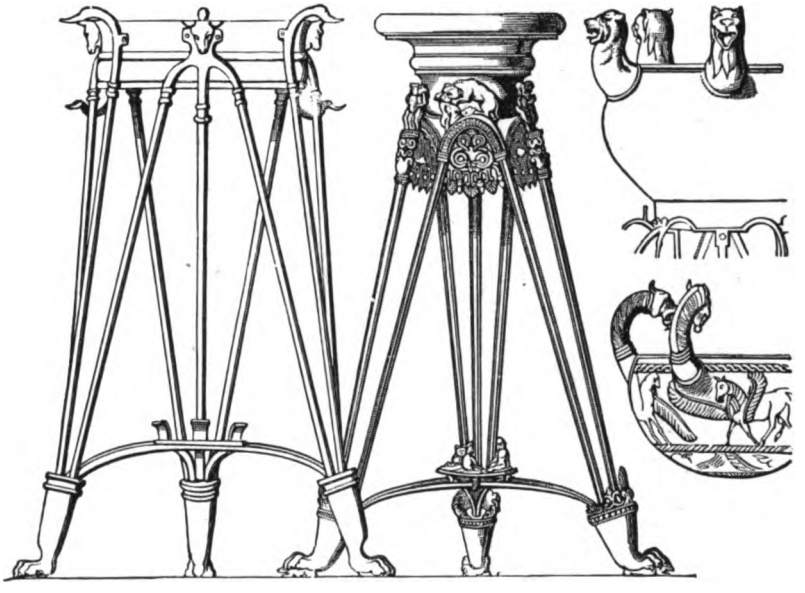


Fig. 236. Antique Tripods and Censers.

struction, the rhythmical symmetry, and the exquisite harmony of true Greek art. As an exceptional case, there may predominate a naturalistic motive, as in the design at *c* (Fig. 237), in which the single lamps are suspended by chains from the branches of a tree. According to its sensible fashion, ancient art always supports the base on the feet of animals, to signify the movability of these graceful pieces of furniture. When, in order that the light may be more widely diffused by being lifted up, the lamps belonging to these candelabra are placed upon their flat top, they, too, delight the eye by their elegant shape and manifold fanciful decoration. Of more stately proportions, with more abundant sculptured ornaments, were the great marble candelabra (Fig. 237 *a*), of which a great many fine specimens may be met with in the Galleria de' Candelabri of the Vatican.

The other articles used in daily life were not less beautiful and splendid; with this difference, that whereas with the Greeks the chief aim and object was the expression of beauty, the Romans laid most stress upon the elegance and cost of material. Not only the clothing of men and women, the equipment and armor of warriors, but utensils of the most varied uses—such as tables and chairs, vehicles, musical instruments, and everything beside—give evidence of that delicately cultivated sense of beauty which is only satisfied when it

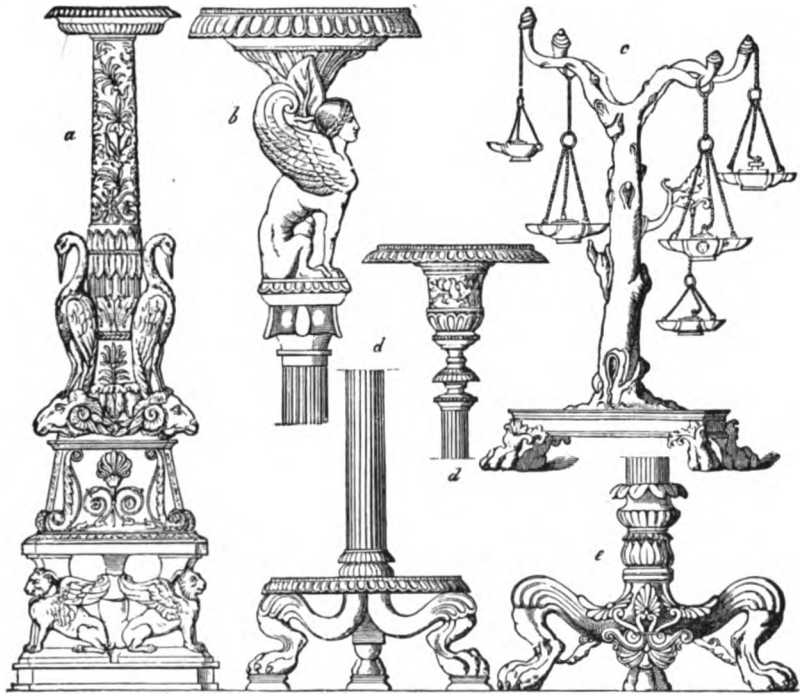


Fig. 237. Antique Candelabra in Bronze and Marble.

finds expression in noble form and artistic adornment. And everywhere we see that the ancient worker in artistic handicraft, especially the Greek, follows one golden rule of action—carefully to observe, in regard to any material used, the mode of treatment demanded by its peculiar characteristics, in the form of the whole, the construction of parts, and also in the decoration, so that one material may never mask its identity under the appearance of another, but that each may reveal itself artistically under its own special form of expression.

We would here bring into pre-eminent notice the incomparably beautiful antique personal ornaments, which, with their noble concep-

tion and imaginative symbolic execution, will serve as models for all time, in such profusion have they been discovered. The Romans, and much more the Greeks, despised the coarse, material pomp which bedizens itself with massive adornments in precious metals but of common workmanship. Even the barbaric Scythian tribes, of what is now the modern Crimea, did homage to the genius of Greek beauty.

The treasures recovered from the tombs of Kertsch (Panti-kapaion), and preserved in the collections at St. Petersburg—golden wreaths and diadems, earrings and breastpins, necklaces, bracelets, and finger rings, even golden ornaments and dimunitive figures (which used to be fastened to the garments, so that they appeared to be interwoven with the tissue)—all belong to the most splendid speci-

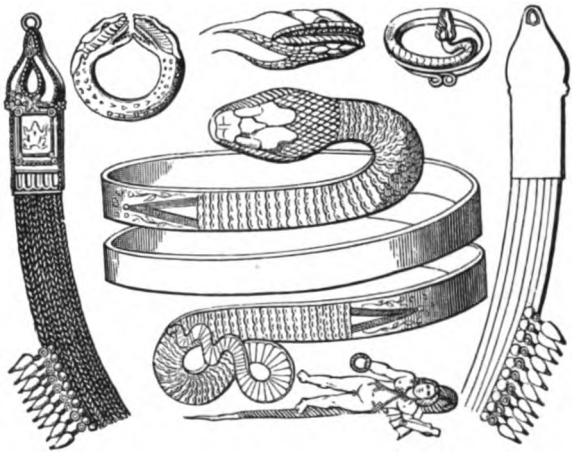


Fig. 238. Antique Gold Ornaments.

mens of their kind. There are choice examples of Etruscan ornaments in the Museo Gregoriano of the Vatican, in the British Museum at London, in the Louvre at Paris, and in the united collections at Munich. Under Fig. 238 we give a few specimens of antique ornaments, in order to afford some idea of the exquisite workmanship and graceful ingenuity which they exhibit.

The productions of the armorer and worker in weapons deserve to rank with these; for they wrought their superb fabrics not only in baser metal, but in gold and silver. Even with the Greeks, warlike equipment, particularly the breastplate and helmet, as well as the shield, was an object of rich, artistic adorning. As far back as the heroic age, great stress was laid upon the noble ornamentation of weapons and armor. Homer delights in pleasing the ears of his listeners by descriptive recitals; the shield of his favorite hero is

wrought by the very hand of Hephæstus himself, thus ennobling for all time the profession of the armorer. The accoutrement of the Romans differed from that of the Greeks, which preceded it, by being very practical, light, and easily adjusted, and all of steel or of highly tempered iron; but the armor prepared for the gladiators, and that for the guards of the palace, was sometimes stronger and heavier. Cuirass and helm were often of bronze and wrought into high relief; and in the apparent passion for almost overloading helm and harness with embossing, the late Roman spirit showed itself. The statue of Augustus of Prima Porta (Fig. 221) offers us a fine example of elaborate equipment; while in Fig. 239 are given other specimens of richly

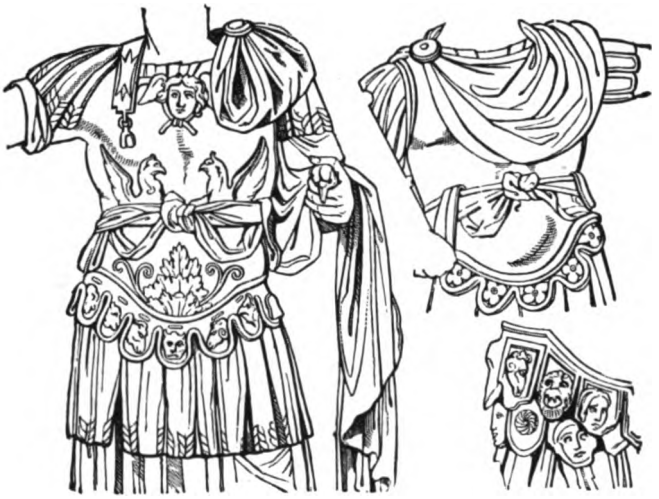


Fig. 239. Roman Armor.

embossed Roman armor. Another armorial relic most remarkable for excellence of chasing is a superb breastplate in the British Museum at London.

Finally, the rare specimens of work in wood which have come down to us from Greek antiquity must not be overlooked. They were found in the tombs of Kertsch, and now form part of the unrivaled antique collection from the Crimea, in the museum at St. Petersburg. There is one sarcophagus, with exquisite carving, another covered with pictures that have almost faded away, and fragments of some object, supposed to be a lyre adorned with fine reliefs. Thus we are struck, even here, in the most insignificant material, with the same fine artistic spirit that ennobles the poorest substance; lacking the stamp of which, the most costly material was of no value in the eyes of a cultured antiquity.

THIRD BOOK.

MEDIÆVAL ART.

Chapter I.

EARLY CHRISTIAN ART.*

1. *Origin and Significance.*

LONG before the public recognition of Christianity by Constantine, the inward thought of the young Church had found its expression in characteristic forms. But as all life still bore the impress of the dominion of the Cæsars, even that striving after the outward representation of the new theological ideas was obliged to satisfy itself at first with the forms already offered it by the art of Pagan times; and so it happened that the youthful, world-agitating ideas of Christianity were fain to put on the corporeal garb of ancient art. Although the new faith was destined to be the greatest single element in the changes which were destroying the ancient world and its art, it had to begin by using its forms and even its ways of expression. While the early Christian epoch was forced, out of sheer necessity, to make use of the antique art models, the only fundamental principles which could possibly have served as bases for the new structure were saved for the times of a future revival; and all that the new ideas could not conform themselves to, was stripped from the ancient treasure of art, leaving just that part, by way of sound kernel, out of which the tree of a Christian art was destined greatly and gloriously to unfold itself.

And here appear the historical position and significance of early Christian art work. It stands as mediator between the ancient Pagan

* Perret, "Les catacombes de Rome." De Rossi, "Roma Sotterranea." Krauss, "Die römischen Katakomben." Desbassayes de Richemont, "Les Recherches les plus récentes sur les Catacombes de Rome." "Monuments of Early Christian Art—Sculptures and Catacomb Paintings;" J. W. Appell, London, 1872. Schultze, V., "Die Katakomben, die altchristlichen Grabstätten." Bunsen, C. K. J., "Die Basiliken des christlichen Roms." Quast, "Die Basilika der Alten." Zestermann, A., "Die antiken und die christlichen Basiliken." Messmer, J. A., "Ueber den Ursprung, die Entwicklung und Bedeutung der Basilika in der christlichen Baukunst." Weingärtner, "Ursprung und Entwicklung des christlichen Kirchengebäudes." Mothes, O., "Die Basilikenform bei den Christen des ersten Jahrhunderts." Reber, F., "Die Urform der röm. Basilika, in der Mitt. der Centr. Arum. zu Wien"; 1869. Melchior de Vogüé, "Syrie Centrale, Architecture civile et religieuse du I. au VII. Siècle." Salzenberg, "Die altchristlichen Baudenkmale von Constantinopel." Lethaby and Swainson, "The Church of Sancta Sophia, Constantinople." Maskell, W., "Ivories Ancient and Mediæval." Kugler, F., "Von den ältesten Kunstbildungen der Christen."

life and the epoch of true mediæval art. Its beginning loses itself somewhere in the first century of Christianity; and its end reached towards the close of the tenth century, with the independent rise of German efforts at culture. In the first period we see the activity of the new art expressions under the influence of ancient Roman civilization; later, the Northern nations enter the arena, not without introducing a good many important changes into the traditional world of ancient models—heralds, as it were, of that thoroughly new and independent tendency which was destined to set a limit to early Christian art, already growing cold and formal, and to open a new path for the development of the race.

2. *Early Christian Architecture.*

A.—MONUMENTS AT ROME.

Nothing gives us so striking an idea of the condition of the early Christians as the plan of the catacombs. The word, of uncertain derivation, describes those extensive underground burial-places of the most ancient Christian congregations which are found especially at Rome and Naples. The use of subterranean tombs had been common from the earliest times throughout the ancient world. In Egypt as in Asia Minor, in Greece as in ancient Etruria, it was the custom to make a resting-place for the dead in rocks and caves; and in all the seats of primitive civilization, spacious underground cemeteries are met with. We find evidence of a similar usage among the Romans; and even now, nearly every new excavation outside of the gates of Rome brings to light some one of those ancient *columbaria,* which still, after thousands of years, keep uninjured the ashes interred within them, in urns ranged side by side, or on shelves one above another. These ordinary burial-places belonged, for the most part, only to slaves and freedmen; but even they exhibit in their design and furnishing all the care and elegance which seemed to be cherished by Roman art even in its decay.

What a contrast to these is offered by the catacombs of the first Christians! As in the narrow, stifling shafts and passages of a mine, one gropes his way alternately downward and upward for hours through the windings of labyrinthine corridors, broken in the blackish, porous tufa. They are, for the most part, only broad and high enough to allow one person to pass, and often so fearfully narrow that it is hardly possible to conceive how the dead could have been deposited in them; and yet this was undoubtedly their purpose. The walls to the right and left are honeycombed with long, low, narrow

openings, scarcely large enough to receive a human body. In these holes the corpses of the dead were laid. The opening was closed by a flat stone, inscribed with the name, or with some other designation, to mark the grave; a little flask of consecrated oil, and another of eucharistic wine, were placed within the cavity, and a small lamp added. When persons of especial distinction, like bishops, or perhaps martyrs, were to be buried, a longer and wider sepulcher was excavated, and a few modest decorative paintings added to the walls. In this way the first timid symbols of Christian faith were ventured upon, in the effort to give the place a worthier character. Besides these, there are occasionally found loftier and more roomy chambers, vaulted, and furnished with niches (*arcosolia*), the walls and roofs decorated with similar paintings; these were evidently designed for chapels, and set apart for the celebration of divine service.

But even this simple attempt at ornamentation avails but little to modify the harsh, gloomy, and dreary character of the catacombs. The picture of the first Christian congregations appears the more distinct to us against their somber background. We can see the persecuted believers, in the dark days of oppression and trouble, bearing in fear and trembling, and in the dead of night, the revered bodies of the fallen martyrs to their rest in those cave-like tombs; we can see them gathered together in common prayer here to unite beside these martyrs' graves for strength to endure and wait in patience; we can watch, as time goes on, the silent congregation of the dead, marshaled in deep ranks about the resting-places of these martyrs and bishops, new recruits continually added to their multitude, until a vast city of the departed has grown up around.

If we were compelled to designate the chief characteristic of these places, we should say that it lay in the almost utter lack of art and form. The inconceivably labyrinthine intricacies of these corridors, with their irregular plan and their insignificant burial-niches; the rude black tufa, the gloom of which is hardly perceptibly diminished, even in especially decorated places, by the modest roof-paintings—how positively and distinctly they contrast with the clearly-marked design, the cheerful decorations in color, the dainty ornaments, and the sculptured details of the ancient tombs!

The unadorned simplicity of the manners of the early Christians, the spirituality and purity of their conception of the divine, their conviction of the utter worthlessness of all earthly things, could not be more clearly shown than by these burial-places of the first Christian centuries.

Among the catacombs brought to light at Rome, the most remarkable is that of St. Claixtus, rediscovered through the ingenuity of De

Rossi. It consists of three interdependent systems, entered by separate stairways, and it contains in the first area not only the grave of St. Cecilia, and the five so-called sacramental crypts, remarkable for their symbolical cyclic paintings, but also the sepulcher of the popes—the burial-places of the popes of the third century—with remains of a rich marble casing of later date. The style of decoration of the second area points to the latter part of the third century; while in the third the crypt of Pope Eusebius (buried 311) is especially remarkable. In these catacombs is also the crypt of Lucina, with its very ancient paintings, as well as the tomb of St. Cornelius. Of the remaining catacombs, those of St. Nereus and Achilleus (or St. Domitilla), with their beautiful, richly decorated atrium, are among the oldest. Those of SS. Prætextatus, Agnes, Priscilla, and Sebastian are also noteworthy. As to the inscriptions found everywhere in the catacombs in great numbers, and now placed in the Museo Lapidario of the Lateran, the oldest of them dates back to the end of the first century. Though some of the paintings can be traced back to the second and third centuries, the greater portion must be assigned to the fourth and fifth. Besides the catacombs of Rome, those of Naples deserve notice, particularly the ones beneath the churches of San Gennaro de' Poveri, Santa Maria della Sanità, and Santa Maria della Vita.

A higher degree of development was only possible to early Christian art, when, with the recognition of the new doctrine by the state, came the opportunity to erect buildings suitable for general Chirstian services and the public worship of God. Notwithstanding the fact that the requirements of the case were altogether novel, it was not possible to avoid the employment of the old, established, mechanical methods of the forms of construction and of architecture which had been used by older times.

That even in some cases there was no scruple felt about fitting up Pagan temples for purposes of Christian worship is proved by the Pantheon and the Church of Maria Egiziaca in Rome. These, however, were and remained exceptional cases; for the church of the Christians was too widely distinct from the ancient temple in its object and exigencies to admit of such changes generally. True, the primary design in both cases was to serve as a house of God; but in the Christian church the whole congregation desired to gather about the altar in order to unite in the solemn celebration of the eucharistic feast. A spacious enclosure was thus necessary, of the whole of which an uninterrupted view should be had, and of which the plan should be such as to best correspond to the requirements of the service. The early Christian basilica completely fulfills these needs.

There has been a good deal of contention as to whether—or to what extent—these buildings had their origin in imitations of the old Pagan basilicas for the purposes of trade and justice. Some attempt has been made to deny the connection, in order to be able to attribute, if possible, an independent merit to early Christian architecture. It has been suggested, too, that the peristyle or columned court of a Roman dwelling, such as must have been used by many a congregation of believers, served as the type of the earliest churches. It would be doing an injustice to the acuteness of the earliest Christian architects to suppose that they could have overlooked the peculiar features of the antique basilicas which they had daily before their eyes. The very first suggestion may indeed have come from those ancient dwellings in which it is probable that the earliest Christian congregations secretly met, in the beginning, to solemnize their worship. Even the atrium connected with the Christian basilica seems to indicate the kindred apartments in the Roman private houses. Enough, that, in the variety of ancient architectural design, there lay more than one pattern for the assemblying places of the Christian congregations.

But it was precisely in the free transformation and the appropriate remodeling of the old styles to a new purpose that the true merit of the Christian architect consisted. The elevated tribunal with its apse was retained; and to it were joined the spaces of the longitudinal nave,* exception only being taken to the columnar arrangement, which formerly divided the tribunal from the main building. Insignificant as these alterations appear, they still sufficed to create a structure with an effect essentially new, and with a distinct stamp of originality. A short consideration of the basilica will prove this.

As, in the ancient basilica, the space dedicated to the dispensing of justice was set apart from those portions appropriated to the bustle of trade, so, in the Christian basilica, the apse was assigned to the bishop and his presbyters, in contradistinction to the main longitudinal portion, where the congregation assembled. The stalls for the priests were arranged semicircularly along the wall; while in the midst, at the back of the recess, the bishop was seated upon an elevated throne. The walls and vaulting of the apse were covered

* Nave: Originally, that part of the structure which rises higher than the lower aisles. Thus in speaking of the Ulpian basilica, in Rome, there is doubt as to whether the highest central part, or nave, was entirely roofed. When the Basilica with a transept was established, the nave was all that part of the church between the transept and the porch of entrance; but in taking this meaning the term had to be stretched to cover the aisles as well as the high central part of the longitudinal building. The choir of a gothic cathedral may be said to have a nave in contradistinction to its aisles; and yet the nave is properly that part of the church which is west of the transept in distinction from the choir which is to the east.

with solemn representations of the figures of Christ, his apostles and saints. On the boundary between apse and nave was raised by several steps, usually over the grave of a martyr, the so-called *confessio,* with its canopy, or baldachin, supported by pillars—the altar upon which the most holy sacrifice was laid open to all eyes, the solemn central point of the whole. Above the canopy soared the triumphal arch,* often resting upon two unusually massive columns, opening its wide span hospitably toward the main building; its inner surface (intrados) likewise glowing with representations of sacred figures. The auditorium itself consists of a broad and lofty central nave, with two or more low, narrow aisles, which are divided from each other and from the center nave by rows of columns, supporting the high clear story of the nave either upon a common architrave or upon strong semi-circular arches. This clear story is pierced at regular intervals by wide, high windows, enclosed by the arches, and affording a strong side-light from above to the whole space. Windows are also occasionally introduced into the lower walls of the aisles; but the apse, on the contrary, in ancient times, was windowless, and lay in a mysterious half-light, in which the gold mosaics shone fitfully in solemn splendor. Nave and aisles were roofed in with rafters, which originally took the place of a paneled ceiling adorned with paintings. The entrances to the nave are placed in the end wall, opposite the altar space: at least one special entrance for each nave, and in large churches, three for the central one. A vestibule is invariably connected with these entrances, usually forming a stately atrium, with an unobstructed quadrangular court and porticos; the court contains a fountain in the center, the whole offering opportunity for the free employment of fine architectural effects. The transept was originally interposed between the longitudinal nave, with its aisles, and the apse: but it is often absent, and in that case the apse opens directly from the end of the high central nave.

An edifice was thus constructed which, in connection with the utmost simplicity of ground-plan, was able to fulfill all ritual requirements, and in a most impressive fashion clearly and significantly to embody its ideal aim in proportions of monumental grandeur. The worshiper, on entering, is irresistibly drawn by the parallel lines of far-reaching columns to the one goal and central point of the whole structure, where the stewards of the divine mysteries served about the elevated altar; while from the high arch, as well as from the walls of the apse, the revered forms of Christ and his chosen ones shine down upon him with solemn grandeur. Should it seem desirable subsequently to enrich and extend this ground-plan—to introduce,

*A name even now given to the chancel arch in English churches.

for instance, a building at right angles to the main, between apse and auditorium, by way of transept; or, further, to add smaller side apses to this; or to build a story or gallery above the side aisles, carrying this two-storied arrangement above the entrance halls also—the ground idea of the basilica, undisturbed by any of these alterations, only proved itself capable of an infinite elasticity of extension, and variety of development.

To the inquiry as to what art types were employed in these new architectural creations, the answer cannot be doubtful. The antique art even when technically degenerate could still offer an inexhaustible treasure in the detail with which to clothe the new architectural framework. Ancient pillar-bases, shafts, and capitals, ancient entablatures with their rich and abundant ornamentation, were the elements from which the early Christian basilicas gathered their structure and their adornment. The greater the number of ancient temples and magnificent buildings that fell into decay and oblivion, the greater the quantity of precious spoils obtained for the beautifying of the basilicas; and whatever could be rescued from the immeasurable glories of the ancient world of the heathen gods, now fallen into ruin, was used, as far as it was applicable; hence the oldest basilicas are the richest and most beautiful in their architectural details. The later the date, the poorer, ruder, and more heterogeneous they become; since even in the earliest times, the builders did not hesitate to make use of columnar remains of the most varied size, material, beauty, and workmanship, from old temples and halls, crowding them side by side into the same arcade in their new Christian churches. Shafts too long for the purpose were cut off; those that were too short were lengthened by means of higher bases or capitals; while among the capitals themselves, all conceivable variations of the Corinthian, Ionian, and Composite styles were mingled in the same colonnade; so that ancient architecture appeared as though it had been resolved into its chaotic first principles.

That with such a mode of treatment every trace of ancient laws and proportions, of intercolumniation, pediment, structure, should have disappeared, follows as a matter of course. As far as that goes, the barbarians themselves could not have made away more recklessly with the remains of ancient art; and indeed, seen from the point of view of that primitive art, this procedure *was* barbarous. It was only by following this road, however, that it was possible for the new-born spirit—keeping its eyes fixed steadily upon the main point, and unconcerned about what must remain as yet of mere secondary importance—to pursue its purpose, and finally to reach its goal. For all it cared, the precious remains of ancient architecture might be shattered

to atoms, and then forced into new anomalous combinations. There was nothing either to retain or to change in what was already past and gone; and only while assimilating itself with a new organism was it possible to evolve from its ruins the germ of a new development.

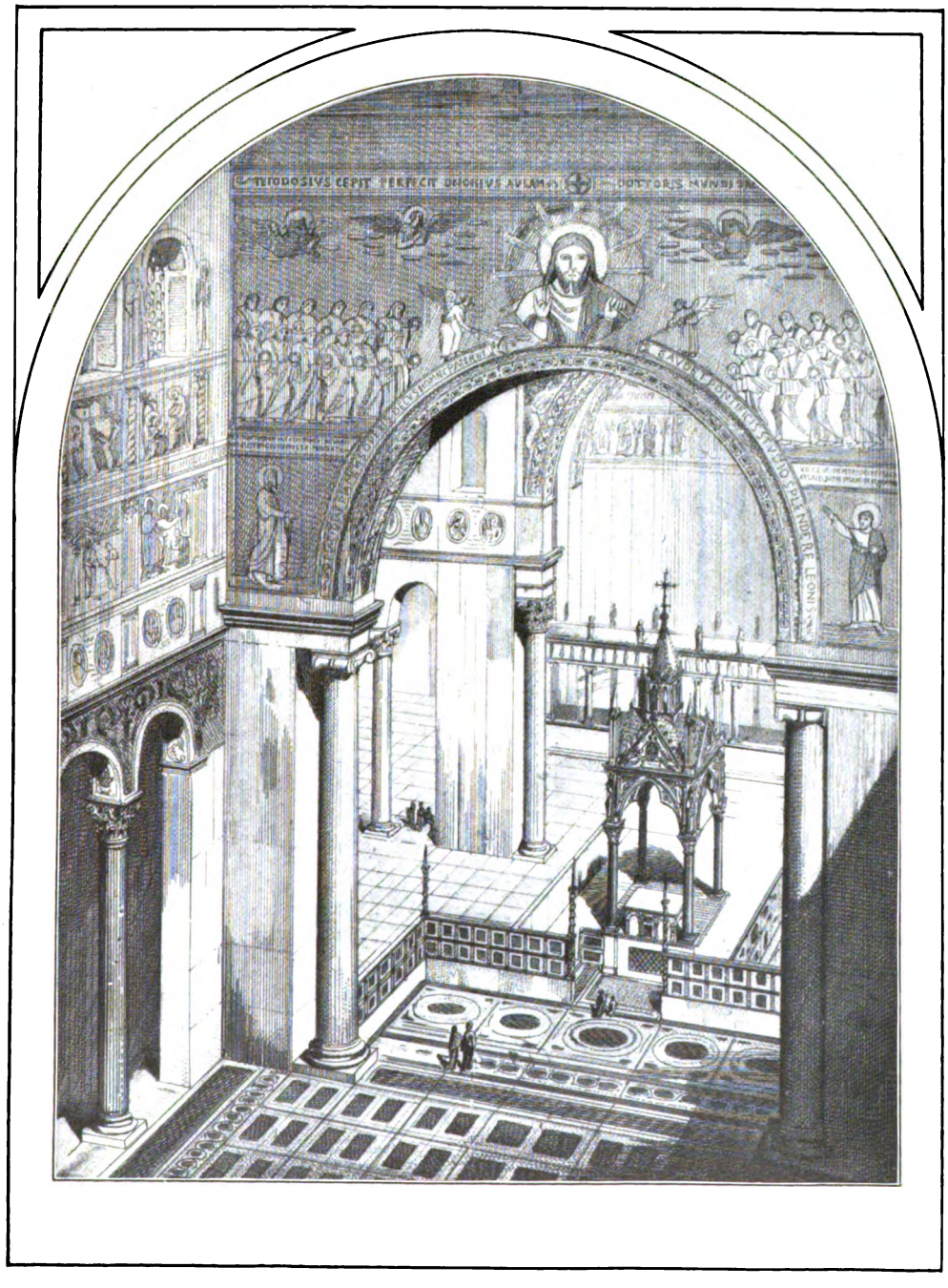
Nevertheless, there were decided attempts made to arrive at a more artistic expression of the Christian idea, even in the form of the oldest basilica. Although its architecture, in its poverty, fed upon the crumbs which had fallen from the somewhat voluptuous board of ancient art, the paintings, on the contrary, which were liberally

Fig. 240. Interior of the Basilica of St. Paul Outside the Walls at Rome.

bestowed upon the interior of the basilica, and with which the builders delighted to cover the vaulting of the apse and the walls of the triumphal arch, soon became the means of giving expression, on a great scale, to Christian beliefs and conceptions; and by this means, though ancient art still furnished the prototypes and standards, the spirit and significance of the new productions very soon took on an original and definite coloring.

In the construction of the outside of the basilicas, the architect rested content with forcibly bringing out the fundamental design, without regarding ornate exterior as at all essential. Only the side on which the entrance lay was perhaps covered, like a façade, with

Interior of the Basilica of "St. Paul Without the Walls," near Rome. The building was an early Christian structure, and was entirely destroyed by fire in 1823 and rebuilt with a good deal of care to preserve its original character. Much, however, was lost in the valuable works of art which filled it; and the covered portico, which once led to it from the city gate, has disappeared altogether. The picture shows only the sanctuary with the canopy over the high altar with the transepts and the apse or tribune beyond.



BASILICA

ST. PAUL'S WITHOUT THE WALLS, ROME

picturesque ornamentation, altogether independent, of course, of architectural proportion.

Among the basilicas* preserved to us, the most prominent in age, grandeur of plan, and magnificence of adornment, was the Church of St. Paul Outside the Walls (*extra muros*) at Rome, destroyed by fire in the year 1828, and lately restored, though, unfortunately, in a too modern style (Fig. 240). Built about 386 under Theodosius and Honorius, it outranks all the existing basilicas in the world in vastness of extent. The mighty apse, nearly 80 feet wide, has its effect increased by a lofty transept of the same width as the nave. The latter is built in five divisions formed by the immense central nave, accompanied by two lower side naves or aisles, parallel with it on each side. Eighty columns of granite rise in four lines, connected by circular arches, dividing the naves, and supporting the lofty clear-story of the center together with the rafters. The transept is entered from the nave by a broad and lofty triumphal arch, resting upon two colossal columns. Apse, transept, and the inner surface (intrados) of the triumphal arch are rich with the splendor of extensive works in mosaic; and the remaining wall-spaces of the interior are also covered with pictures. An extensive atrium, surrounded by colonnades in front of the structure, completes the perfect plan of a basilica of the first rank.

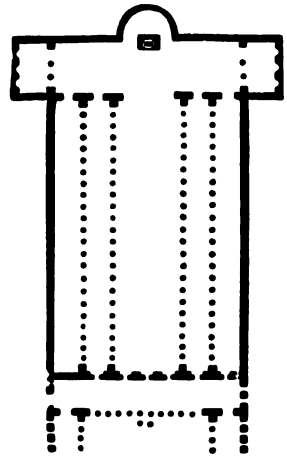


Fig. 241. Plan of the Old Basilica of St. Peter at Rome.

The old Church of St. Peter (Fig. 241), destroyed in the fifteenth century by the erection of the new St. Peter's dated back to Constantine's time, and was likewise a five-naved parallelogram, with an extensive transept and vestibule, and must have resembled San Paolo in its sublime simplicity, its power and dignity of construction. Of the remaining Roman basilicas, Santa Maria Maggiore, modernized in later times, but still very beautiful, dates its original foundation back to the first half of the fifth century. Though containing

* Gutensohn and Knapp, "Denkmäler der christlichen Religion." C. Bunsen, "Die Basiliken des christlichen Roms." Essenwein, "Die Ausgänge der classischen Baukunst;" "Die Fortsetzung der classischen Baukunst im oströmischen Reiche" (in "Handbuch der Architektur"). Canina, "Ricerche sull' Architettura più propria dei Tempj Cristiani." Hübsch, "Die altchristlichen Kirchen nach den Baudenkmalen und älteren Beschreibungen" (the before-mentioned "Guide to Italy" by Gsell-Fels, in several volumes).

only three naves, it is very stately; and its rows of columns are still connected by a continuous architrave, instead of by arches, as was also the case with the old Basilica of St. Peter. Of the same period is Santa Sabina, on the Aventine, with twenty-four fine columns, which all originally belonged to the same ancient building; and San Pietro in Vincoli, an imposing edifice in spite of its modernization, with a central nave 50 feet wide. The two basilicas near the gates of Rome, San Lorenzo and Santa Agnese, are smaller, of elegant construction and graceful proportions, and date from the end of the fifth to the beginning of the sixth century. Both buildings are diversified, and made particularly attractive by the addition of a gallery story, with an upper row of columns.

Finally, we have San Prassede and San Clemente, belonging to the close of the ninth century. The rows of columns forming the arcade of these two churches alternate in rhythmic regularity with single isolated pillars; and in the former an even greater freedom of construction is employed, crossed arches with walls of masonry rising from these pillars, and serving to support the rafters. Thus new elements of architectural development arise even here out of the old fundamental plan, and we may trace in them a hint of later transformations. Then a new link begins to be supplied in these later basilicas, in order to counterbalance the antagonism between arched and columnar construction; that is to say, a broad projecting ornament, like an impost, is arranged above the Corinthian capital, serving as a fitting point of support to the arch of observably wider span. This is the arrangement in Santa Agnese and San Lorenzo.

Beside the basilicas, other architectural types made their appearance at an early day, which in Rome, as elsewhere, were generally used for some special religious purpose. Prominent among these are round or polygonal designs of a more or less complicated kind, intended particularly for baptismal or mortuary chapels. One of the earliest round buildings is the mausoleum of the daughter of Constantine, mentioned above, and still in existence as the Church of Santa Costanza.

The important Church of San Stefano Rotondo is of much more noticeable dimensions, and of similar plan, but without arching. It was originally encircled by two low galleries, running between double rows of columns; so that, to a certain extent, the principle of the five-naved basilicas seems to have been employed here upon a circular structure of great size. The details, belonging to the end of the fifth century, are antique throughout; though the high ornamental impost over the capital may be considered a new element. The remarkable baptistery of the Lateran belongs to the number of bap-

tismal chapels, and also dates from the fifth century. It is an octagonal structure, with eight antique columns connected by elegant architraves; above them is a second columnar arrangement, whereby the high galleries and the still more slender central structure acquire a particularly light and airy appearance.

B.—MONUMENTS AT RAVENNA.*

The most important Italian city after Rome, at this period, was the ancient Ravenna. Promoted by Honorius in 404 A.D. to be the capital of the Western Empire, it was afterward adorned with superb monuments by Galla Placidia, the sister of that Emperor.

(A) (B) (C)

Fig. 242. Capital from Ravenna.

When, at a later day, Theodoric conquered the kingdom for the Ostrogoths, he zealously carried on the architectural works which had been already set on foot; and, after his death, his daughter Amalasuntha encouraged other similar undertakings. The artistic productions of this period are characterized by modifications which are perhaps outgrowths of the Northern mind, though in their essentials they remain faithful to the ancient models. A decided turn in the fortunes of the town occurred after the victory over the Ostrogoths by the Eastern warrior Narses, when Ravenna became the residence of the Byzantine exarchs. From that time artistic productions began

* F. von Quast, "Die altchristlichen Bauwerke zu Ravenna"; Berlin, 1842. Also Hübsch, "Die altchristlichen Kirchen," etc. Dr. Rudolf Rahn, "Ein Besuch in Ravenna," from Zahn's "Jahrbücher für Kunstwissenschaft," 1868. Edward A. Freeman's "Historical and Architectural Sketches," chiefly Italian; London, 1876.

to show the influence of Byzantine art, which had already made considerable progress.

The basilicas of Ravenna, though inferior to the Roman in extent and grandeur, and rejecting the transept in their plan, embodied a more vital development of the main architectural idea, and at an early period, added an independent bell-tower to the church building, which rose in a simple, cylindrical form, without any tapering or delicate

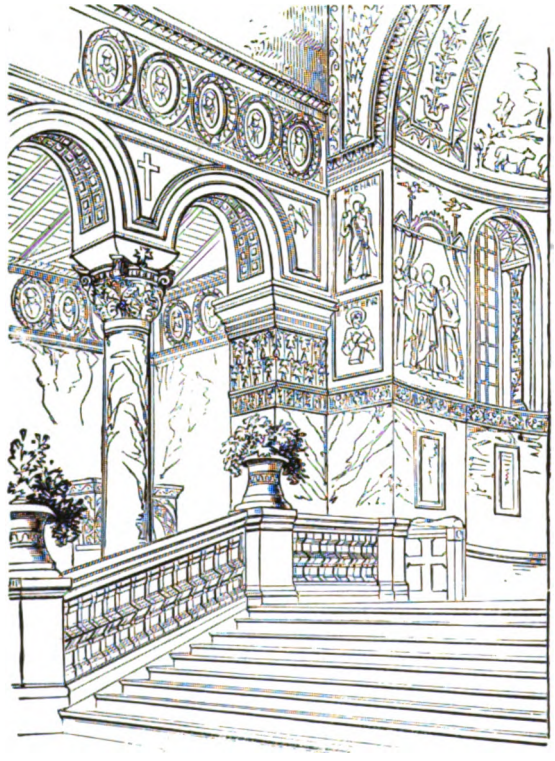


Fig. 243. Part of Apse in San Apollinare in Classe.

construction of parts, terminating in a somewhat flat roof. On the other hand, the development of the clear story of the middle nave showed a decided progress toward free and natural forms. Here, too, a new idea in the treatment of detail grew out of the old tradition, finding expression especially in the independent and elegant, even if somewhat uninteresting, conventional development of the capitals (Figs. 242 A, B, C.) as well in the impost ornaments above the latter, which are now fully perfected.

Among those edifices which have been preserved to us, the most important, since the five-naved cathedral had to make way for a new

structure in the last century, are the Church of San Apollinare in Classe (Fig. 243) (situated in the ancient port of Ravenna; Classis, now ruined and extinct, with only the church to recall its memory); and the church of San Apollinare, Nuovo, in the town (Fig. 244).

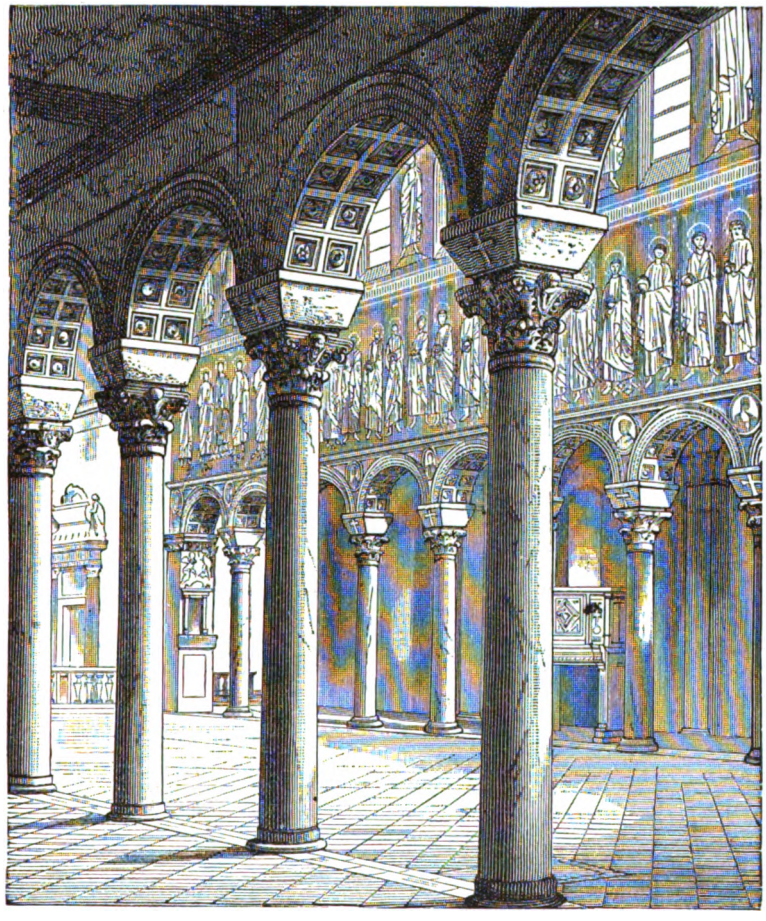


Fig. 244. San Apollinare, Nuovo.

The first of these was built between 534 and 549, and gives, with its twenty-four Greek marble columns and its rich mosaic decorations, and the ancient rafters of its nave, the impression, undisturbed by any incongruity in its construction, of a venerable early Christian monument. Its pillars are placed on postaments, the capitals bearing the perfected impost ornament; and above the richly adorned archivolts extends a mosaic frieze of medallions containing portraits. The tri-

umphal arch and apse are likewise covered with representations in mosaic. The other church is far richer in mosaic decoration.

Among buildings intended for other uses, the Mausoleum of Theodoric—the modern Church of Santa Maria della Rotonda—is one of the most original architectural works of its class. Suggested, without doubt, by the mighty tombs of the emperors still existing in Rome, it exhibits ancient architectural ideas expressed in the forcible, robust fashion of the Germanic race. It is a simple decagon, formerly

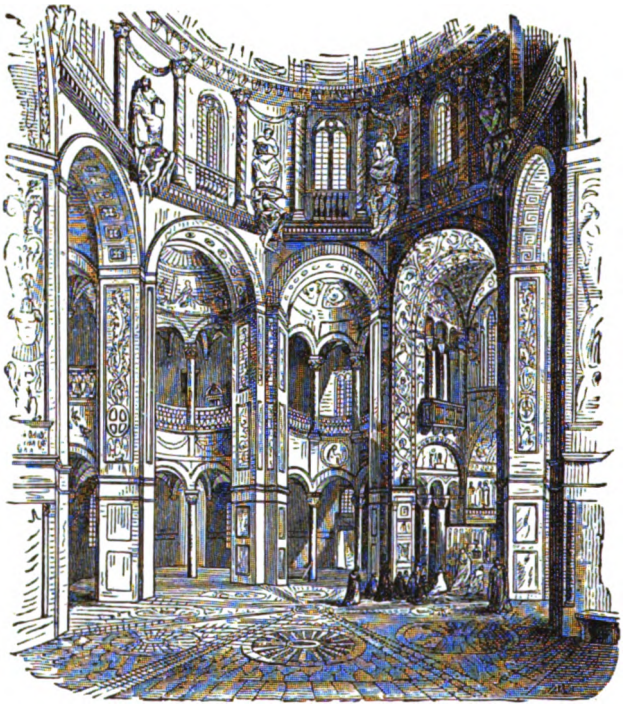


Fig. 245. Interior of San Vitale. (Ravenna.)

surrounded by an arcade gallery, and roofed in by a cupola 34 feet in diameter, hewn out of a single mass of stone. In the colossal construction and robustness of form of this monument one is reminded of the Germanic and Celtic nations of the North, where the grave of an illustrious leader is designated by a few gigantic stones heaped one above the other. Less imposing, but of no less interest, is the Mortuary Chapel of Galla Placidia, the little modern Church of SS. Nazario e Celso, begun by that Empress in 440. It is cross-shaped; the arms of the cross being roofed in by circular vaulting, covered by a dome at their intersection, the whole richly adorned with mosaics.

Probably the intention of depositing here not only the sarcophagus of the Empress, but those of her brother Honorius and her husband Constans, may have been the reason of the original design.

More important than the other buildings at Ravenna, and indeed, undoubtedly one of the most remarkable existing monuments of Christian architecture, is the Church of San Vitale, built 528-547 (Fig. 245). At the time of its foundation, Byzantine influences were already strong in Ravenna; and before its completion, the town had become subject to the Greek Emperor. It is no wonder, then, that we here see, for the first time in the West, a specimen of Byzantine tendency which marks a decisive point in the history of that branch of art. A central domed structure is here adopted as the main body of the edifice, its employment having been practicable hitherto only in buildings of inferior dimensions and importance. This form developed, however, such a delicate, rich, and intricate organization, that architecture, as hitherto practiced, would hardly have recognized it. The main space forms an octagon 47 feet in diameter, bordered by massive pillars, which support the clear story with the dome. Between these piers the central space expands into several great niches, with walls broken by two stories of columns, which establish the connection between the arcades below and the galleries above. Only toward the altar the space opens at right angles to the choir, which ends in an apse. Over the great arches spanning the eight pillars arises, at first octagonally, the lofty clear story of the central nave, broken by windows, which are divided, Byzantine fashion, by little columns built into the walls. Over all rises the circular dome, in whose construction the architect has applied a unique mode of treatment —also met with in ancient times—for lessening the weight of the lower portions as far as possible; that is, the vaulting is composed altogether of amphora-like clay vessels, fitting one into another, the pointed end of one inserted into the mouth of the other. When we add that the altar opposite one entrance hall is furnished with two little round towers with stairs, we have an essentially complete plan of this remarkable building. A superbly rich finish, impressive mosaic pictures in the domes, and casings of colored marble in the lower portions, increase the striking impression created by the whole. At the first glance, one remarks instinctively the contrast offered by the almost perplexing richness and refined development of the fundamental plan to the stern simplicity and intelligible character of the basilica type of church. We shall now inquire into the cause of the lighter and more complex type, and of the architectural tendency which it implies.

C.—MONUMENTS IN THE EAST AND IN BYZANTIUM.

Even before Christianity solemnized its victory in Rome by the erection of the impressive monuments we have described, great numbers of structures dedicated to the worship of God had sprung up, like peaceful oases of the new civilization, in the far-off regions of the East, upon the borders of the Lybian and Syrian deserts. They are nearly all of the type of simple basilicas, with the later Roman stamp in matters of detail, and marked by various peculiar modifications. The African churches, still numerous in Egypt and Nubia, as well as in the oases of the Lybian desert and the coast-lands of Algeria and Cyrenaica, are usually of small dimensions, but are not infrequently planned with five naves. The naves are separated by rows of columns or pillars. Above the aisles traces of galleries are occasionally found. The apse, which is sometimes repeated on the west side, does not generally project outward, but is simply inclosed within by walls placed at right angles to the end wall. The St. Reparatus Basilica, built 325, at Orléansville, was one of the earliest buildings of the kind; it had five naves with pillars, and the apse was raised above a crypt. A second apse was afterward added to serve as the tomb of Bishop Reparatus. A fine mosaic floor is the most important relic of this building. Ruins of a five-naved basilica, with seven naves divided by square piers, may still be seen in the modern Tefaced, recognized as the ancient Tipasa. A basilica with columns and three naves may be found at Deir-Abn-Faneh in Upper Egypt.

The Christian monuments of Central Syria, embracing the period from the second to the sixth century, are still more extensive, and have been recently opened to the world by careful explorations. There are two groups of them: the southern belonging to the modern Haurân; while the northern extends over the country between Antioch, Aleppo, and Apamea. There are the remains of more than a hundred towns, with entire streets and rows of houses, with churches, cloisters, cemeteries, villas, and baths, still in much the same condition as when deserted by their inhabitants at the time of the invasion of the Mohammedans in the seventh century. The most peculiar are those in the Haurân, where the utter lack of timber compelled a construction in stone throughout. The early basilicas of this region, especially one at Tafkha (Fig. 246), have their three naves formed by piers, which are connected by transverse arches for the reception of the massive granite plinths. Above the side naves, galleries are added; and, by their means, all three naves are carried up to an equal height. The horizontal stone ceiling forms the roof of this primitive

structure, which is built of granite in every part. The same style of building prevails in other edifices, especially at Chakka, where a basilica, apparently of the ancient type, and a large palace-like building, have been preserved. Later, Byzantine influences begin to be felt, as is proved by the octagonal, domed structure of the Church of St. George at Esra, dating from the year 510.

In the Antiochian group, the columned basilica with wooden rafters occurs most frequently. It is almost invariably three-naved, and without a transept; its apse is generally rectangular, and within the walls; and there are low side naves without galleries. As a rule, there is a vestibule, with an open portico, at the entrance side; occasionally, a second arcade arrangement is added above it; and sometimes even the tower is connected with the façade. The proportions of these buildings are disposed according to the classical laws of form,

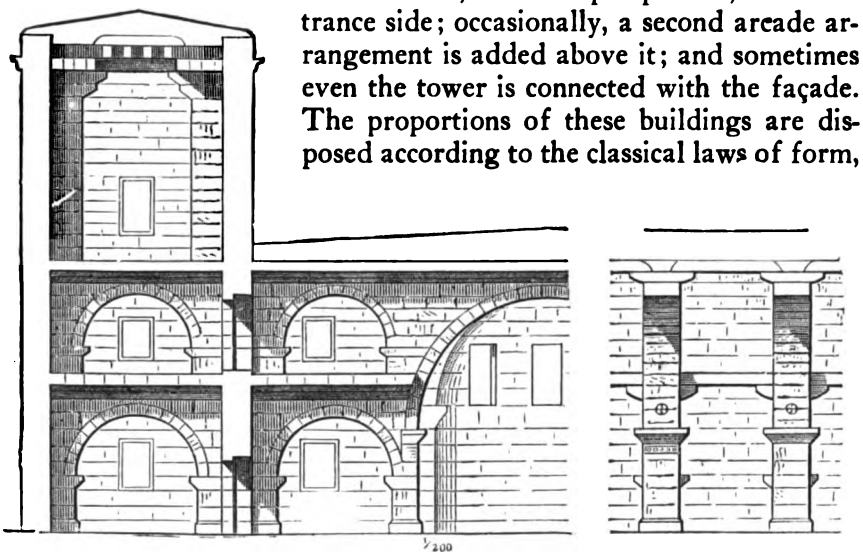


Fig. 246. Basilica at Tafkha (section).

although these are obviously in a transition state, tending too strongly, in the matter of ornament, toward mere lifeless designs, and gradually degenerating into an unrestrained, barbaric style of treatment. Basilicas of this class may be found at Kherbert-Hâss and Elbarah, connected at both places with extensive cloisters, at Kalat-Sema'n, and at Deir Seta. Others at Hâss and Behioh have perfectly rectangular choirs; and still others, at Baguza and Surmanin, have round or polygonal projecting apses, in which the recesses have a columnar arrangement that recalls the later Roman structures. Isolated instances of the basilica with piers are found at Rueiha and Kalb-Luzé. The grandest edifice of all, however, is the cloister-church of St. Simon Stylites, at Kalat-Sema'n—a columned building with three naves, in the form of a Greek cross, with arms of equal length, except the eastern one, which is slightly prolonged. The central point of the

cross forms an octagon about 90 feet wide, with low, arcaded galleries and apses in the diagonal angles, the whole forming one of the grandest of early Christian monuments.

Besides these churches there are numerous well-preserved dwelling-houses, built of great square stones, and containing few rooms, which open, through a long colonnade of two stories in height, upon a court that separates the house from the street. Fig. 247 gives such a group of buildings in Djebel-Riha. Whole cemeteries of splendid burial places are connected with these towns, consisting partly of rocky

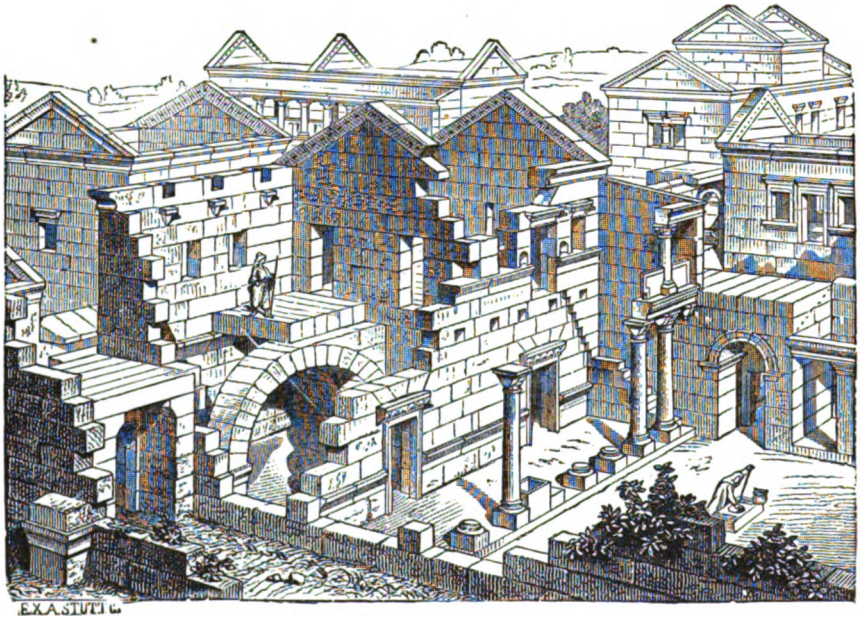


Fig. 247. Group of Buildings in Djebel-Riha.

tombs with porticos in the ancient style, and with vestibules or closed façades, and partly of tombs standing in the open; often uniting the Oriental pyramid with the elements of the classical columnar structure, occasionally resembling an imitation of the antique peripteros, and, in a few later specimens, carrying up the Roman dome-structure over a central ground-plan, generally square. In spite of the barbarism of their details, these structures still preserve a very successful imitation of the simple, noble, antique element in art; and the sculpture has a childlike directness and vigor which was lost in the more mature Byzantine art.

When Constantine transferred the central point of his Empire to the East, numerous and magnificent churches and palaces soon arose,

under his fostering care, in the new capital founded by him on the Bosporus. Here, too, it was the forms of ancient art which were to fix their stamp upon the new imperial city; and while old Rome gradually faded away, new Rome, by virtue of the art borrowed from the mother-land, rose to fresh splendor. So far as we have any knowledge of the ecclesiastical edifices of the East, they seem, in general, to have resembled the Western basilicas of that day. The church which Constantine caused to be erected over the Holy Sepulcher at Jerusalem was a five-naved basilica, with galleries above the lateral naves. The Church of St. Mary at Bethlehem, erected by St. Helena, mother of the Emperor, and still standing, is likewise a considerable edifice with five naves, and a stately transept with semicircular ends, but without galleries over the lateral naves. In Byzantium, galleries were, as a rule, retained, in order that, according to the Eastern custom, women might have a place apart in the upper story. The numerous churches of Constantinople in its earliest epoch were doubtless of this description. The love of pomp peculiar to the East and the luxurious and degenerate monuments of Asia Minor must necessarily have had a marked influence in bringing about a richer development of ornamental details. Byzantine art only began its higher flight and independent development with the first years of the sixth century. The splendid reign of Justinian (527-565) limits and defines this turning-point. The Byzantine state had, especially since the downfall of the Western Empire, defended itself vigorously against the inroad of the barbarians; and the old glory of Rome seemed to live again on the shores of the Bosporus, in the last asylum found for the civilization of the ancient world. The Greek power of reasoning and of logic in construction reappeared in its full force, and Byzantine architecture was added to the small list of styles which have individual character and self-derived charm. But the political tendencies of the time were away from a vigorous national life. The barbarians of the North and East constantly increased in strength and daring, the art tended downward with the nationality, and, with all its appearance of power, a gradual torpor was creeping over it. Those who, in modern times, combat these facts, forget that the isolated points of light in the civilization of the later Byzantine period were too transitory to modify essentially the collective characteristics of that epoch. It is certain that the summit of Byzantine development was reached in the sixth century; and that after that time, not a single new thought of importance, or a radical movement of mind ever disturbed the stagnation of the Eastern Empire.

Among all the phenomena of this remarkable condition of affairs, artistic—and especially the architectural—productions rank first in

real significance. The adoption of the domed church, with the strange and subtle forms of plan seen in S. Vitale at Ravenna and S. Sophia at Constantinople, was as daring a thing as was ever done in building. Combinations of bold originality, powerful effect, and impressive grandeur were produced, bearing splendid witness to the technical knowledge, the energy, and the skill of their authors. Though the dome design had before been employed for baptisteries, chapels-mortuary, and similar small edifices, it was not until now adopted as the dominating style in the building of the principal churches. Since divine worship had developed a particularly splendid ritual with the Byzantines, rendering a building of varied construction necessary, and since the dome did not assimilate well with the parallelogram, the plan of the church now became decidedly complicated. Thus a system of domes and half-domes, with every conceivable variety of wall niche pertaining to them, was connected with the most varied designs. A structure with piers, broad, flat surfaces, and mighty archings took the place of the columnar building of the basilica; and the rows of columns assumed a merely subordinate position to the great leading characteristics, being used as supports to the galleries and to define the side spaces. But, while all parts of the building were planned with strict reference to the crowning central point, the great principal dome, a decentralizing element appeared in the addition of the choir, which had become necessary in connection with the service at the altar—a witness to the inevitable discord between the purposes of the ritual and the design of the architect.

Fig. 248. Capital from Santa Sophia.

In the ornate finish of the buildings, casings of colored marble were lavishly employed upon the walls and piers; and glowing mosaic pictures beautified the vaulted hollows of domes, half-domes, and niches. Byzantine art in the true Oriental spirit has a special predilection for the utmost wealth of ornament, and keeps this end steadily in view in the adjustment of the different parts of the architectural design. The columns with their bases and capitals, the pediments, friezes, door and window frames, as well as the gallery railings, were all of marble, covered with ornamentation. These decorations, although founded upon ancient tradition, and full of delicate beauty, too often bear witness to the torpidity of art, and finally die out in weak, ill-defined surface ornaments. The form of the capitals is the most

Church of Hagia Sofia (Saint Sophia) at Constantinople. The four slender minarets are of Turkish structure, and the enormous buttresses on each side of the great round arch are much later than the body of the church; but the great dome with its ring of windows, the half dome seen on the left and the similar one on the right, as well as the great arch itself, all belong to the original building erected by the Emperor Justinian in the sixth century A.D.

THE MOSQUE OF ST. SOPHIA

striking exemplification of this point. They start from the antique Corinthian type; but in consequence of their convexity—the flattening of the projecting leaf-carving and its reduction to a fantastic arabesque, from which only the upper volutes awkwardly project—they acquire an entirely novel form, scarcely leaving the faintest suggestion of the beautiful antique (Fig. 248); while they also lack the vigor of Western Romanesque leaf-carving. Above these capitals appears that impost which we have already described as an element of Byzantine art.

Byzantine art of this epoch pays little attention to the exterior of its buildings; but even here its huge and heavy masses, with the round dome projecting in the center, have a characteristic look.

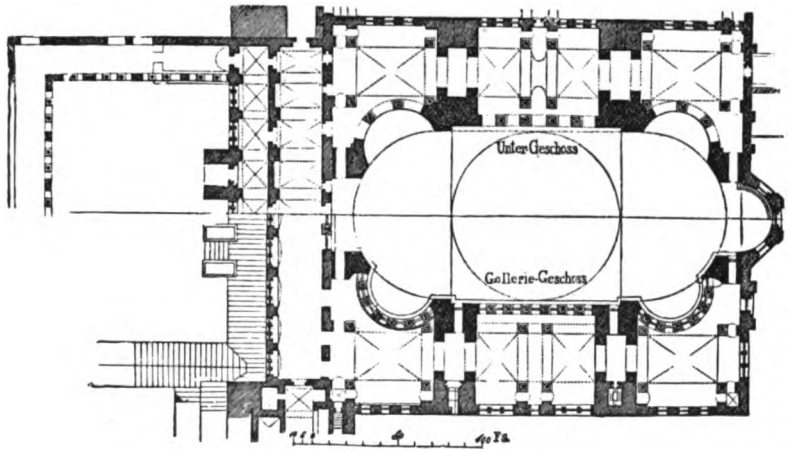


Fig. 249. Ground-Plan of the Church of S. Sophia.

We have already made acquaintance with an important monument of positive Byzantine architecture in the Church of San Vitale at Ravenna. Another noteworthy structure, dating back to about the same period, in the reign of Justinian, further illustrates the history of the development of the Byzantine centralized form of building. This is the former Church of SS. Sergius and Bacchus at Constantinople. As in San Vitale, the central octagonal space is inclosed by a dome and encircled by corridors two stories high. But the main space is extended on four sides by niches with recessed columns; and the outer walls form almost a square, the choir with its apse standing out from the main mass.

Though many fluctuations were noticeable in the treatment of outline at this stage; though the square and the polygonal ground-plan strove for the mastery; the system, nevertheless, produced its greatest

and highest result during the golden age of Justinian's reign, in a structure destined long to remain the highest type of Oriental architecture. This was the Church of S. Sophia at Constantinople. Constantine had already raised a church in his capital in honor of the Divine Wisdom, which, being destroyed by fire, was restored by Justinian with all imaginable splendor. Anthemius of Tralles and Isidorus of Miletus were summoned to serve as its architects. The most precious columns and other remains from the temples of Asia Minor were collected; and no pains were spared in the preparation for this great enterprise, or the carrying-out of the design. Owing to the tireless and stimulating zeal of the Emperor, the whole building was completed in the almost inconceivable short space of five

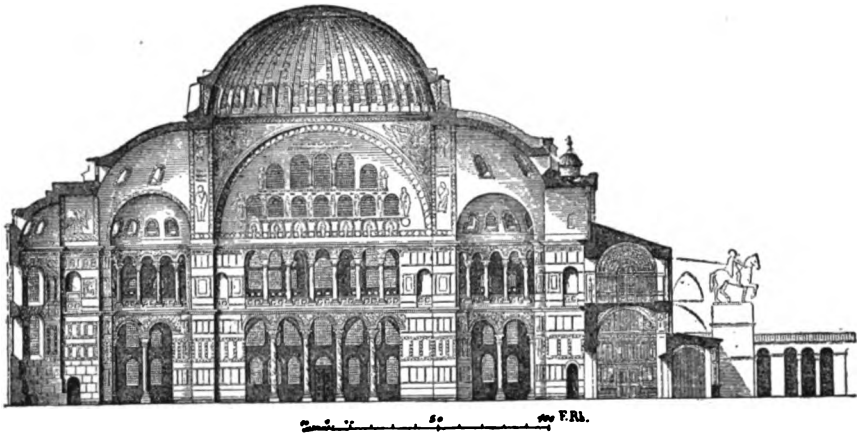


Fig. 250. S. Sophia, Constantinople.

years (532-537). Twenty years later, in 558, after the occurrence of an earthquake, the dome, which had been very much injured, was pulled down, and carried up again to a somewhat greater height on strengthened supports. The structure remained in this form until the conquest of Constantinople by the Turks, when it was turned into a mosque, and slender minarets were added to the four corners. In the interior the Turks were satisfied with merely covering up the mosaic pictures; so that, in essentials, the building still retains its original character.

Its ground-plan (Fig. 249) is founded upon the attempt to harmonize the rectangular design of the basilica with the development of dome architecture. The central point of the main space is the mighty cupola, 106 feet in diameter, and rising on four piers, placed at the corners of a square, to a height of 177 feet. The dome, not-

withstanding its height, is very flat, being constructed in only the segment of a circle. It rises from a very low drum, which rests upon the top of the four great arches joining the principal piers. Triangular pendentives fill up the spaces between the apexes of the arches and this drum. In this way the square space was covered; and, in order to elongate it, a mighty semicircular recess was added both in front and behind, with walls resting upon the piers at the angles of the dome and upon two intermediate piers. At the sides, however, a partition wall, supported by rows of columns, inclosed the nave; and by means of these arch openings communication between the nave and the side aisles was easy.

The two apses, whose half-domed vaults rest directly against the sides of the great central dome, and continue its lines, enlarge the space of the main nave to an elongated oval, corresponding in artistic design to the middle nave of the basilica. At the entrance end of the building this nave is connected with the great vestibule, equal to the width of the whole structure; and at the opposite end it terminates in a great altar apse and two side apses, necessary for ritual purposes; so that in this direction also there occurs a further departure from the semicircular ground-plan. The two long sides, on the other hand, have low aisles attached, which, however, owing to the varied strengths of the projecting supports and the variety of their vaulting, have not the character of side naves throughout, but seem like an aggregation of smaller spaces. Instead of the tranquil stability of the basilica naves, they present to the eye an attractive series of picturesque vistas. Galleries are carried over all the side spaces, opening toward the middle nave between rows of columns, and containing the places for women. Light is admitted through a circle of windows at the base of the principal dome, and through others in the half-domes and the great transverse walls, amply illuminating the interior. An almost quadrangular exterior, 252 feet long by 228 feet wide, incloses these variously grouped interior spaces. Before the entrance hall, with its nine great doorways, is built an atrium surrounded by colonnades, after the manner of the great basilicas.

The interior decoration of this imposing structure corresponds with its importance. All the wall surfaces and the great piers, up to the pendentives, are incased with precious and many-hued marble tiles. The rarest and most gorgeous specimens from the temples of Asia Minor were selected for columns; and all the vaulted spaces—dome, half-domes, and apses—glowed with a magnificent background of gold mosaic, enframed with bright-colored ornamental bands, and interwoven, like tapestry, with pictorial representations, strikingly set off by the gold background. This splendor shone with wonderful

brilliancy in the intensity of the illumination from above; filled all the building with an overwhelming radiance, and, added to the manifold variety in the ascending lines of the arches and vaultings, produced a most powerful impression. The inventive spirit which designed all this ventured upon a bold system of construction; and the effect of a dome whose broad span rises unfettered with so few supports is thoroughly imposing. The Church of S. Sophia, contrasted with the early Christian basilica, may be admired as a marvel of constructive science and inventive combination, yet whoever recognizes especially the beauty of simplicity, comprehensive clearness, and har-

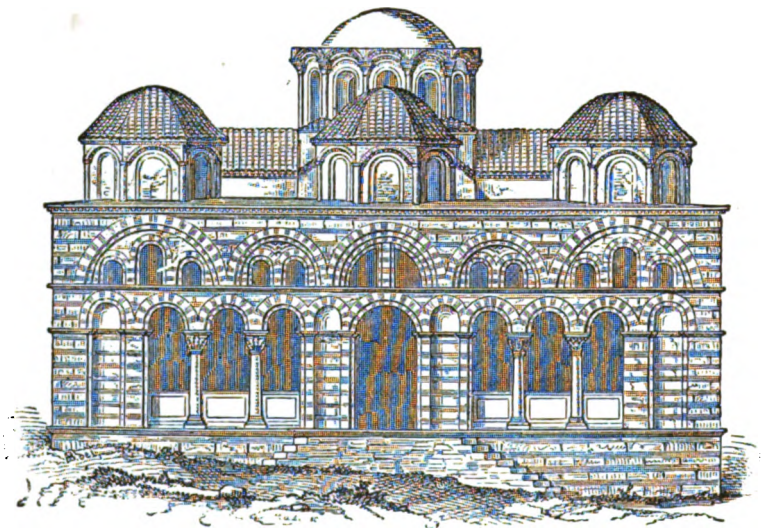
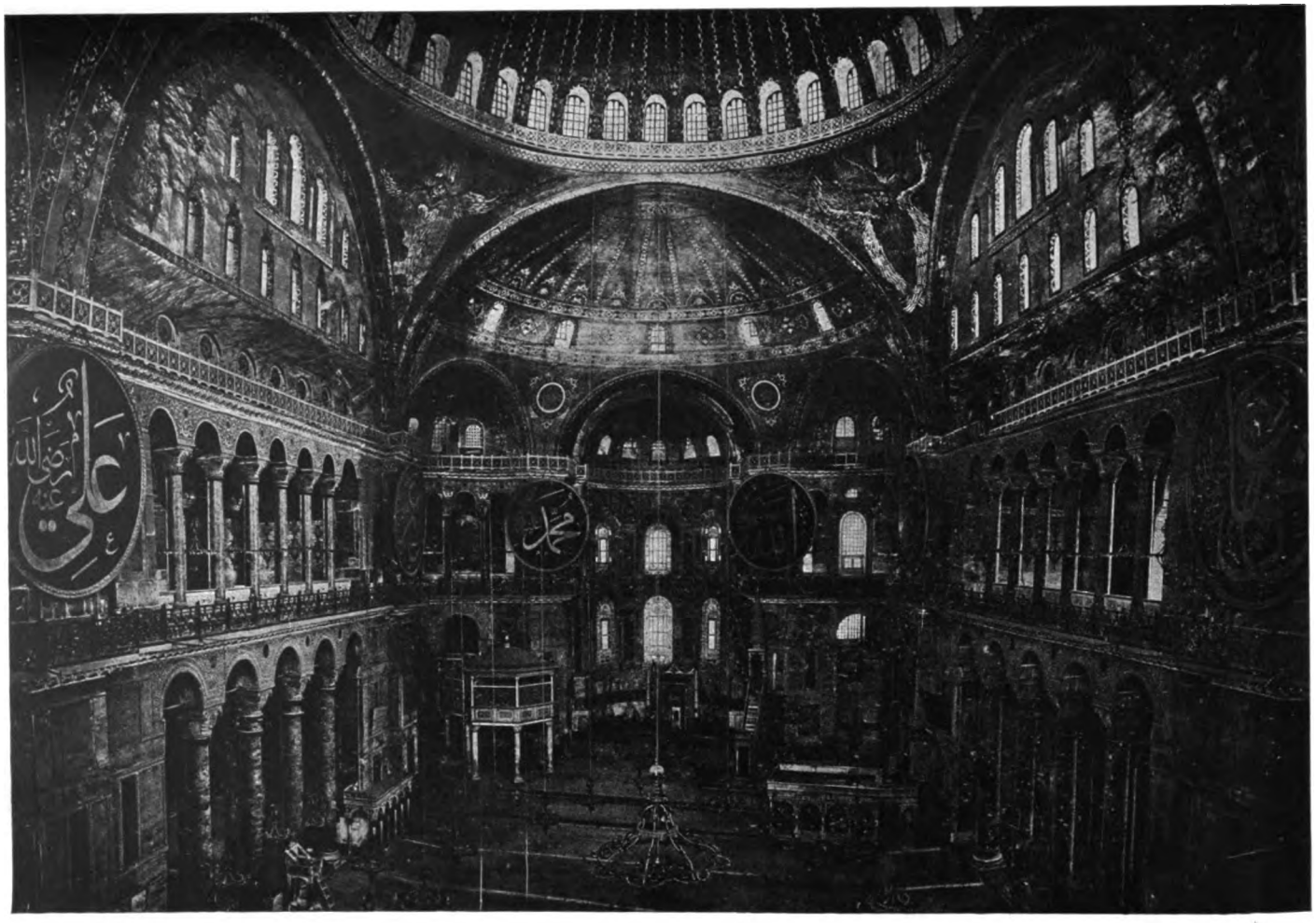


Fig. 251. Façade of the Church of the Mother of God. Constantinople.

mony of *ensemble* will award the palm to the basilica; though it must be admitted that in the basilica church the upper walls are defective, and the roof is not a necessary consequence of the other arrangements of the structure. In this direction the significance of S. Sophia is not to be undervalued, offering as it does a fully developed system of masonry roofing.

The form of the architectonic details is but little noticed under such a mass of surface decoration. Only the heavy Byzantine form of the capital gives us a decided proof of the character of the original architectural conception. The exterior has a disagreeable look of monotony; and the flat principal dome, with its adjoining half-domes, rises heavily, like a great natural mound, over the masses of piers and masonry. Only the minarets added by the Turks lend ornament—though of a foreign, inconsistent look—to the exterior.

Interior of the Hagia Sofia (see preceding plate). This church is a typical monument of Byzantine art; and it is evident that the interior is what the designers had chiefly in mind. The width from side to side below the cupola is very close to 100 *feet, and the great arches at left and at right have the same span, so that the main part of the church is a square of* 100 *feet with two half round projections at opposite sides. The beautiful mosaics have been generally whitewashed, but the sculptures and marble columns remain uninjured.*



BYZANTINE ARCHITECTURE

INTERIOR OF THE CHURCH OF ST. SOPHIA, CONSTANTINOPLE

With the Church of S. Sophia Byzantine art reached its zenith. Henceforth it remained the highest type of art for the East, though in most churches a simplification of the ground-plan was demanded; and the builders were content with repeating the motive of the principal dome in lesser proportions, connecting it with an elongated main structure, approaching a square in shape, and generally consisting of three naves. As time went on, the interior of the larger buildings often assumed the form of a cross, with arms of equal length—the Greek cross, as it is called; while this central portion, both of nave and transept, was elevated above the lower parts of the interior. The great dome invariably rises at the point of intersection, often with the addition of smaller domes at the terminations of the four arms of the cross. A more slender tapering of the dome is also noticeable, owing to the fact that a drum is first built on a polygonal, or else round, ground-plan, thus offering a better place for the windows; and from its cornice rises the vaulting, still moderately flat. The three apses and the vestibule, extending the whole width of the building, its front wall resting upon columns, are also customary in Byzantine churches of this epoch. The interior is, as a rule, ornamented with frescos, in default of richer material; the exterior, on the contrary, bears an agreeable artistic stamp, in consequence of a more elegant columnar adornment, as well as through the employment of materials of different colors, arranged in stripes or bands. The church of the Mother of God (*Agia Theotokos*), built at Constantinople in 900 A.D., is an attractive specimen of this later Byzantine style of architecture (Fig. 251).

To all intents and purposes, however, the Greek Church had nearly exhausted the range of her artistic conceptions. The germ from whence sprang her architectural style was not simple enough to be capable of a richer, more prolonged development; hence it soon became hard and bare, like all the other attributes of Byzantine life.

D.—MONUMENTS IN THE NORTH.

The buildings of the Ostrogoths in Ravenna have already shown us how the Roman forms were apprehended by the Germanic peoples. In after times, when the Northern nations came into the foreground of history, and when, after the end of the great migratory period, they began to form new states, the artistic efforts connected with those new relations became necessarily of great significance; and it was the kingdom of the Franks that especially made itself the standard-bearer of this civilization. Its mightiest ruler, Charlemagne, ever cherished as

his loftiest ambition the restoration of the dominion of the Cæsars; and as the vast extension of his empire made the realization of this ambition a magnificent possibility, it was no wonder that in all artistic production the traditions of the antique world became the standard for this people. At this period, however, the sources of ancient art were more remote, both as to time and place, than before. The elements and implements of all his undertakings must be found among an almost uncivilized people; and all attempts were made immensely more difficult, even in merely mechanical matters, by the lack of worthy materials, of technical knowledge, and of every kind of necessary adjunct. Besides this, the spirit of his people, with all their freshness and strength, was not yet sufficiently aroused; the new demands of national life were too pressing to permit of that freedom of mind so necessary for artistic creation. All that we meet with in the way of art works among the Germanic peoples of this period is consequently but a copy of Roman style, not without traces of barbarous transformation wherever lack of comprehension or of practice appeared to make it unavoidable. In some cases, too, Byzantine influence is conspicuous—an influence which, even on Italian ground, affected the monuments at Ravenna.

Only isolated examples of this period have come down to our day. St. Lorenzo, in Milan, may be mentioned as a monument possibly belonging to early Christian times.* Though the remains of some antique thermæ were perhaps made use of in its construction, the similarity of the ground-plan to that of San Vitale seems to suggest this epoch. It has been rebuilt, to some extent, in later times; but the grand effect of the interior clearly indicates its original plan. The dome of the quadrangular central space soars, bold and free, above four wide semicircular apses, in which are columns supporting upper and lower galleries.

The Palazzo delle Torri in Turin, a mighty pile of brick, is a relic of the time of the Lombards, constructed in several stories, with pilasters and niches. Germany possesses, in the oldest portions of the cathedral at Treves, a later, perhaps a restored, specimen of the numerous splendid architectural enterprises of the sixth century; for this city, as the capital of the Austrasian kings and the seat of an archbishopric, stood in the first rank among the towns north of the Alps.

The numerous architectural structures with which Charlemagne adorned the cities of his broad empire, and above all, his capital and favorite town of Aachen or Aix-la-Chapelle, are of still more importance. Though no traces remain of his castles at Nimeguen or Ingle-

* Cf. Hübsch, "Die altchristlichen Kirchen," plate 16.

heim—of the palaces of his capital, or of the brilliant halls which he built at Aix, and which, as late as the fourteenth century, filled Petrarch with admiration when he made his journey into Germany—it may easily be imagined that they were modeled after the plan of the Roman imperial palaces then still existing. Only the imperial chapel of Charlemagne has been preserved, in all its essential parts, in the nave of the minster at Aix (Fig. 252). This structure, the building of which lasted from 796 to 804, combines within itself the best of what the mighty Emperor could command in the way of sumptuousness of material, technical skill, and richness of adornment. Ravenna was obliged to yield up the marble columns, and Ravenna also gave the ground-plan. Indisputably, it was the design of San Vitale which gave a motive to the Carlovingian architect. In this instance, too, there is a central octagon surrounded by low galleries; though, by renouncing the system of niches, a greater simplicity of plan was secured. On the other hand, the spaces between the piers are filled out with an upper and a lower colonnade, corresponding to an arcade and gallery. In this arrangement, the crudeness of the period betrays itself; for the upper columns, with their capitals and entablature, come awkwardly into contact with the intrados of the arch. On the other hand, forethought and technical skill are shown in the general construction. The middle space is roofed by a dome; the polygonal aisle that surrounds this space is roofed with cross-vaulting; while the lofty tunnel-vaulting of the upper galleries forms an effectual counterfort force to the side thrust of the dome. Nothing remains now of the mosaic decorations which once covered the vaulting; but the rich doors and parapets of the galleries, cast in bronze, bear witness to the solidity and splendor of the finishing, as well as to the influence of the strictly Byzantine type of ornamentation. The former rectangular altar niche made way later for a much larger choir, built in the Gothic style.

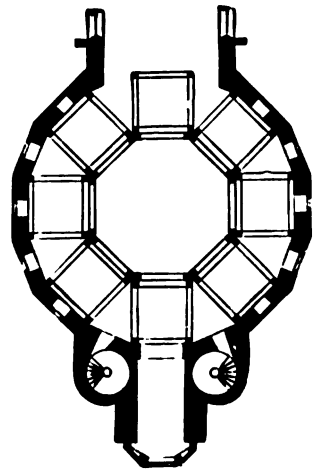


Fig. 252. Minster at Aachen.

The predilection for the Byzantine conception of fundamental forms appears in Charlemagne's Minster as in the Church of San Lorenzo at Milan; but there are also indications that in other respects the employment of the basilica model was considered altogether lawful at that time. As very few specimens have been pre-

served of structures of this class at that period, the remarkable building-plan of the Monastery of St. Gall, prepared about the thirtieth year of the ninth century by a monk at the Frankish court, and still preserved in the library of the monastery, is of deep interest to us in making our survey complete. We recognize the clearly accented plan of the basilica, with its broad central and two narrow side naves, as developed by the Romans; and only in the addition of a second choir, opposite the principal one, we perceive the further encroachment of the needs of the ritual, as well as an important enrichment of design in the addition of the two circular bell-towers. As a lesser work of the same epoch we may point out a hall at Lorsch, formerly open, and possibly belonging to some great ecclesiastical edifice, which betrays, in its columns, cornices, and other details, a constrained but careful imitation of ancient works; while the bright mosaic, and marble decorations of the wall-panels harmonize with the gaudy taste of the time. Remains of a simple pier basilica of the Carlovingian age have recently been pointed out among the cloister ruins at Steinbach in the Odenvald (possibly the cloister church at Michelstadt, consecrated by Einhardt in 821); and also of the Abbey Church at Seligenstadt, also founded by Einhardt in 828. Nieder-Ingelheim preserves a triumphal arch from the former palace chapel of Charlemagne; and the capitals of some isolated columns from the same building have found their way into the museum at Mayence.

3. *Early Christian Sculpture and Painting.*

The development of the plastic arts in early Christian times shows the same essential features as their architecture, with the one difference, that the tracing of the remarkable process by which a new life struggled to express itself through formal, antique, and traditional methods is still more interesting than in the former case, because the contrast between the essence and the form is even more strongly marked. Christianity, still in its youth, could only approach with fear and trembling that expression of a sensuous life which was characteristic of ancient sculpture down to its latest period. The danger of a return to the old, varied forms of idolatry was too serious. The stern admonition of the commandment to worship the Lord in spirit and in truth alone, fell with special emphasis just then, when to the veneration of the native divinities of Rome there had lately been added the fantastic cults of Egypt and the East; hence it was that the Christians only occasionally dared make use of the plastic art to express the new ideas in the most timid manner; though, in making such use, they willingly conformed to the laws of antique art. There-

fore there were no new forms and representative types produced in the sculpture of early Christian times: the genius of ancient Roman sculpture is the inspiration of all such work. Nothing is rarer than single statues of this period. With the exception of statues of the emperors—executed, as in earlier times, according to the traditional style of Roman art, though with a gradual diminution of artistic force—and setting aside memorial monuments which, like the columns and obelisk of Theodosius at Constantinople, followed well-known Roman models, there only remain for our information a few specimens of sacred figures. The great bronze statue of St. Peter,

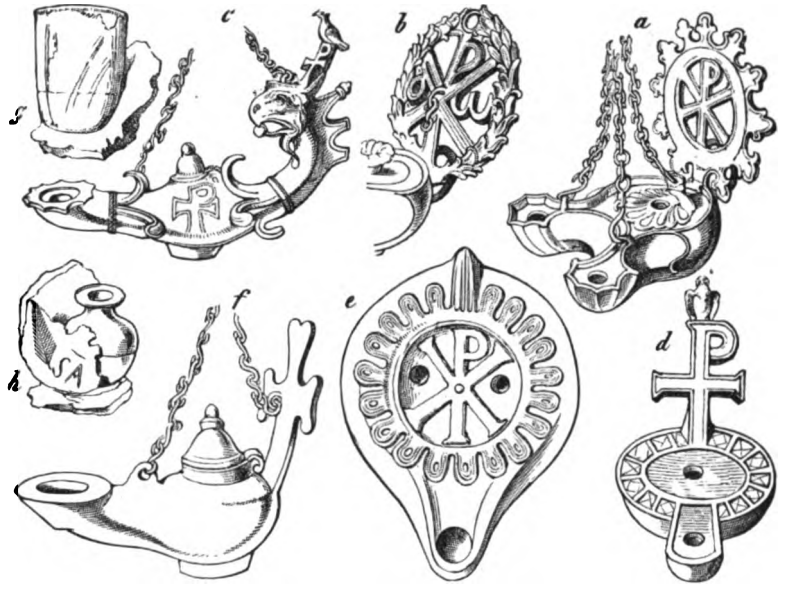


Fig. 253. Early Christian Bronze Lamps and Glass.

seated, in the main nave of St. Peter's at Rome—possibly a production of the fifth century—severe and full of dignity in its bearing and drapery, and conceived in the spirit of the antique portrait statues, is the most important among these remains. Another seated statue of St. Hippolytus, a marble of the same epoch, in the Christian Museum of the Lateran, has unfortunately been modernized in its most important portions. Nevertheless in its lower part, which is antique, it indicates a similar tendency. No examples have been preserved of statues of Christ, although we know that the Emperor Alexander Severus had one executed as early as the third century. A few isolated specimens of marble statuettes of the Good Shepherd have been preserved in the Christian Museum of the Lateran.

But the Christian idea was to find a more vigorous and general expression in the realm of painting; for in this connection there was less danger of an intermixture of ancient Pagan modes of presentation. The claims of the merely corporeal element were partly withdrawn into the background; and a greater facility for expressing the intimate social relation, the spiritual communion which united the members of the new society, was possible by means of the flexible element of color. Young Christian art availed itself more and more of this means, and conquered for itself a new field of activity, with artistic laws and technicalities of its own, which determined the direction and limit of its productions; hence this is the mold in which the art of early Christian times was destined to shape itself in the most original, most significant, and most unfettered form.

But before this consummation could be attained, a long series of stages had to be traversed, leading from an utter tastelessness in art to the rainbow-hued glory of the superb basilicas. The first picture-writing of early Christian times begins in an insignificant fashion with a few symbolic signs. At first these were only the Christian cypher, the Greek *X P*, or the alpha and omega, *A* ω (the beginning and the end), which, of frequent recurrence upon sarcophagi, as well as upon vessels and utensils used in every-day life, recalled devout memories to the hearts of believers.

This simplest form of inscription is especially attractive when associated with a reminder of ancient decorative art; as in the case of the bronze lamps (Fig. 253, *a, b*) so many of which are found in the catacombs; or on the bottom of the glass jars (Fig. 253, *g, h*) which are also found there, and which it was a favorite custom to fill with the wine of the eucharist, and put into the tomb with the dead. In the same way the Greek word *ichthys* (fish) was employed instead of the name of Christ, or the simple representation of a fish was used in the same connection. Art expresses itself here, as in all primitive productions, in symbols which are full of meaning, and which substitute an arbitrary sign for the real subject, according to a universal agreement. The number of these symbols was speedily increased as the knowledge grew of the picturesque phraseology of the Holy Scriptures. The cross as the sign of the sacrificial death, and of redemption; the palm as a symbol of eternal peace; the peacock as a symbol of immortality; the lambs, the vine, the ship, all clearly referring to well-known passages in the Bible—these, and many others of the same kind, were soon found in great numbers on sarcophagi, as well as on walls, and on many vessels and utensils.

All these symbols use a language of which the form is thoroughly conventional and general, and the meaning is very apparent. The

element of literal pictorial representation of a personal and individual character is not contained within its scope. The first decided step in this direction is that representation of the Good Shepherd which has been so often repeated, and so much a favorite, where the shepherd is watching his flock, and bringing back the lost lamb to the fold. As Christ himself described himself under this allegorical figure, ancient Christian art took up the beautiful comparison with deep feeling, although contenting itself, even in this instance, with a general

Fig. 254. Ceiling-Painting in the Catacombs of St. Calixtus.

ideal allegorization, and in no wise attempting the delineation of a definite character. The shepherd is depicted as a graceful, beardless youth, in the short garment peculiar to shepherds, according to the ideal manner of antique art. But art did not stop here. The principal scenes in the life of our Lord, especially his miracles and his Passion, were frequently and lovingly dwelt upon, as well as prominent passages in the Old Testament which contain references to his Passion, and which were set forth as striking parallels; in this way the range of representation became ever wider and richer. The wonderful

deliverance of Daniel from the den of lions, of Jonah from the belly of the whale, the ascension of Elijah, the sufferings of Job, and many similar scenes, were plainly shown to contain references to the Messiah; particular allusion being also discovered therein to his sorrows, his persecutions, and to the promised redemption. The forms of ancient art were brought into play to represent his appearance, all further allusions being expressed merely by means of symbols. Sun and moon, day and night, rivers and mountains are simply given as personifications, side by side with the personages of the Old and New Testament, as a proof how their original mythological meaning had

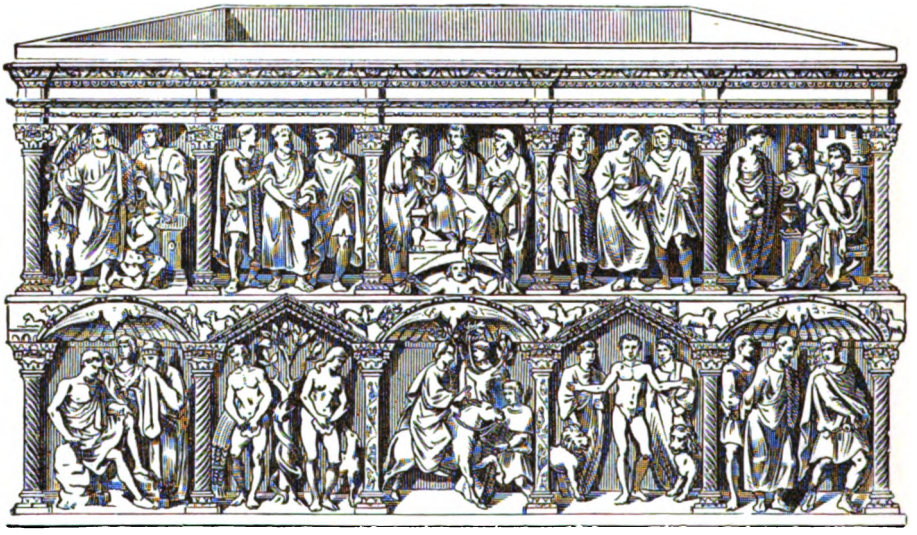


Fig. 255. Sarcophagus of Junius Bassus. (Rome.)

faded out in men's minds. This is even more distinctly the case when creations of Pagan mythology are made the subjects of Christian representation—when Cupid and Psyche are to be met with among Christian works of art, or when the artist goes so far as to represent Christ as Orpheus with the lyre. This occurs in the centerpiece of one of the most beautiful specimens of ancient Christian wall-painting found in the catacomb of St. Calixtus, which we give in Fig. 254. In the eight spaces surrounding the principal figure are small landscapes, containing alternately an animal or representation from the Old and New Testament: as Moses smiting the rock; opposite him Christ raising Lazarus from the dead, who is represented as a mummy; then Daniel in the den of lions; and, facing him, David with the sling.

The sarcophagi belong to the most important monuments which are brought to our notice in this shifting kaleidoscope of early Christian art. Their sides are decorated with reliefs, according to the old heathen fashion. Their artistic treatment indicates the character of Roman works of this description of a later period. As in the case of the latter, these display a superficial, mechanical character. They are sometimes overburdened with ornamentation; again they possess a simple rhythmical harmony; and again they recall the later art of Rome by architectural decorations of small columns with pediments

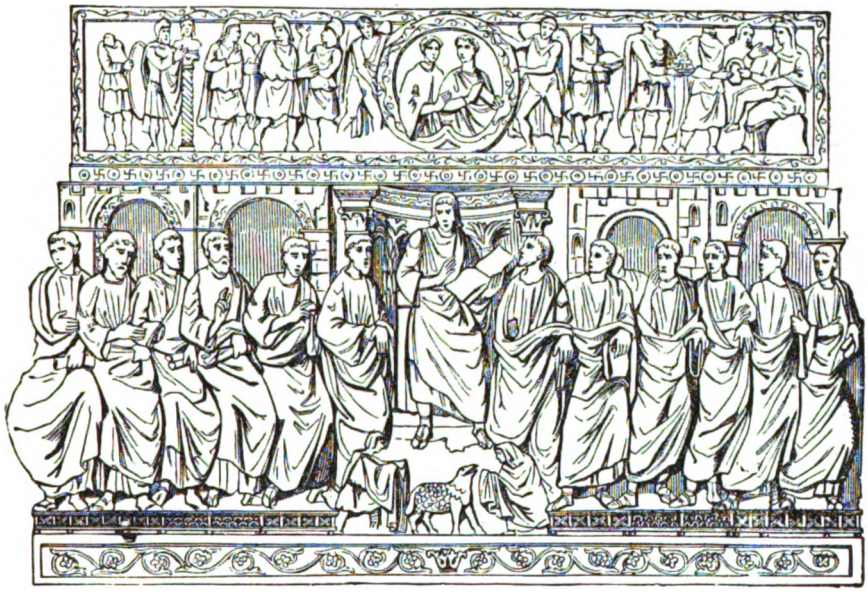


Fig. 256. Sarcophagus in the Church of St. Ambrose. (Milan.)

and arches. The miracles of Christ—the healing of the man with the palsy, the multiplication of the loaves, and the turning of the water into wine, and others—are contrasted with striking scenes from the Old Testament. Moses causing water to flow from the rock, the creation of the first man, the fall, and so on, all are, with slight variations, the constantly recurring themes of these sculptures. In some of these, there is a genuine utterance of the antique spirit; in others, the sentiment is dull and heavy, and there is an entire misunderstanding of the anatomy of the body—an illustration of the abrupt decline of this last relic of ancient art.

The catacombs contained a great number of works of this kind, which have been almost all removed to the Museum of the Lateran. Others, again, are to be found in the vaults of St. Peter's at Rome

(Grotte Vaticane), at Ravenna, and in several other places. One of the finest of these monuments is the sarcophagus of Junius Bassus (died 359), in the vaults of St. Peter's (Fig. 255). It contains ten subjects from the Old and New Testaments in two rows of figures, the meaning of which is not always clear. Much ruder is the sarcophagus of Probus (died 395), which is to be seen in the same place. In the Church of St. Ambrose in Milan, there is a remarkable sarcophagus under the chancel, in which there are striking reminders of ancient art. In the middle (Fig. 256) is Christ teaching, surrounded by his apostles; above him, on the border of the cover, are the figures, in medallion, of the dead inclosed in the sarcophagus; and near these, in obvious parallelism, the adoration of the magi, and the three youths before Nebuchadnezzar, who is vainly urging upon

Fig. 257. Ananias and Sapphira. (Ivory Tablet at Salerno.)

them the worship of idols. A work remarkable in conception and magnificent in execution is the porphyry sarcophagus of Constantia, the daughter of Constantine, which has been transferred from her burial chapel to the Vatican Museum. Its surface is covered with heavy branches of grape-vine, and with genii gathering and pressing grapes; the difficulty of working with the material employed contrasting finely with the exquisiteness of the workmanship.

The works in ivory open another field of investigation in early Christian art. Ivory had been employed by the Romans for many purposes of luxury; among the number, the diptychs of the consuls, which consisted of two writing-tablets fastened together, the covers of which were adorned with carvings. These were imitated during the Christian period, and adapted for use either as movable shrines or as book-covers for the Holy Scriptures. Scenes from the life of Christ were designed upon these tablets at an early day, as well as incidents in the lives of the saints. There is an ivory tablet in the sacristy of

the Duomo at Salerno, on which is illustrated, with antique spirit, the death of Ananias (Fig. 257). Sapphira is rendering the lying account of her stewardship to the apostle, who is holding up a warning finger, while her husband is meanwhile being carried out. Above, the outstretched hand of God is represented, as a material reminder of the fact that this is an illustration of his immediate interposition. There are also to be seen numerous boxes of ivory, which were doubtless originally designed to contain the consecrated elements, the surface of which is also covered with reliefs. The museum at Berlin contains a notable example of this kind; the Hôtel de Cluny at Paris, another; and there are several similar ones in Hanover, in the possession of Ph.D. F. Hahn, bookseller.

It was in a similar way that the conceptions of the new doctrine acquired an artistic expression in the earliest Christian times—by means of the wall-paintings in the catacombs. At a very early date a pictorial decoration of the simplest and most transitory kind began to be adopted in the vaulting, the niches, and on the walls of the more important chambers, in the chapels, and the resting-places of the illustrious dead. At first the type of antique wall-painting was carefully followed, save that Christian symbols and pictures take the place of Pagan forms. Still, their character in the beginning, as in the antique, was that of a light and cheerful decoration. The division of space, the treatment of color, and the style of drawing, do not differ from the heathen prototype.

Among all these representations, the favorite figure, and the one that most frequently recurs, is that of the Good Shepherd. He appears in a buoyant, youthful figure, with a short garment, tenderly carrying the recovered lamb upon his shoulder (Fig. 258). About him are grouped representations of other figures and important incidents, whose bearings upon each other are often thoughtfully expressed; while throughout the conception is usually clear, and the general arrangement corresponds to the rhythmic type of the antique. All these representations still exhale the pure, simple atmosphere of ancient art, which gave to the whole a certain dignity of ornament, without giving prominence to individual figures.

An air of deep spirituality, hallowed tranquillity, and peaceful calm makes these figures and scenes—most of them on a small scale—especially attractive, portraying as it does the typical expression of the essentially Christian temper. The catacombs of S. Calixtus are particularly rich in such works (Fig. 254); above all, the very ancient pictures in the crypt of Sta. Lucina and in the sacramental crypts, so called, as well as in those of SS. Nereus and Achilleus (or S. Domitilla), of S. Prætextatus, S. Priscilla, S. Agnese, and

others at Rome. The third, rather than the fourth century, was the period which brought this tendency to its full development; for this mode of representation had already begun to dissatisfy the succeeding epoch. In the course of the fifth century there came up, in place of that tranquil, composed, spiritually symbolic form of expression, a striving after a more distinct stamp of individuality, a more forcible conception of personality. The more antique tradition retired into the background, the less satisfaction was felt with a dignified and cheerful system of decoration in the spirit of the older art. The narrowly defined architectonic limits were broken down; and grander forms attained to more powerful, independent, and striking expression. While the individual figure had at first unassumingly proclaimed its symbolical significance merely as a part of the great whole, it was now to be more distinctly marked, and its personal characteristics indicated as history defined them. The scenes of the sacred legends were strikingly portrayed; and the figures of sacred personages, before all others that of the Saviour, were thrown forward in strong relief. It was not enough now to represent Christ under the allegorical figure of the Good Shepherd; men endeavored to reproduce the appearance of the Divine Teacher in the fullness of spiritual power and calm sublimity. Although the technical means were constantly growing more meager, and the artistic knowledge of form becoming indistinct, the spiritual power, the soulful grandeur, of these pictures often rises to a lofty significance, which more than makes up for poverty of form in depth and intensity of expression.

Fig. 258. The Good Shepherd. (From the Catacombs of Sant' Agnese.

Numerous specimens of this tendency are preserved in the catacombs of San Ponziano at Rome. The type of the head of Christ appears here already fixed in its more essential features. The noble oval of the countenance is shaded by long brown, flowing hair, parted in the middle; the large eyes look straight forward with a deeply thoughtful gaze; the nose is long and delicate, the mouth earnest and

gentle; the beard has almost the downy look of youth. The left hand holds the open Book of Life; while the right is raised, as though in solemn command and exhortation.

Though Christian painting was compelled to lead a hidden, subterranean life in the catacombs, it was called forth at an early day to a powerful and splendid activity. The basilicas which, after the recognition of Christianity by the State, were erected everywhere in great numbers, stood in need of a style of decoration appropriate to the present position of the Church. At first, the models of ancient art seem to have served as an inspiration for this purpose also. Whether, at last, that light decorative style did not appear suitable for the great spaces and solemn dignity of the ecclesiastical structures, or whether the necessity for a richer method was felt—perhaps giving an impulse to the tendency toward Byzantine modes of thought—we find, even in the fourth century, an art in use for the decoration of churches which, though undoubtedly originating in the antique, was now pushing its way up to an essentially new and loftier development under the influence of novel requirements. This art—that of working in mosaic—which was employed among the old Romans almost entirely for the adornment of the pavement, was called to fulfill a higher destiny in adorning the walls of the Christian temples with the grandly solemn figures of Christ and of his saints. To be sure, this technical form was far surpassed by wall-painting in lightness and play of design; the more delicate lines of the physique, the softer shades of expression, did not lie within the compass of its possibilities. But early Christian art laid but little stress upon the charm of physical grace or the idyllic expression of sentiment. What it wanted was great and powerful fundamental features, forcibly expressed types of the sacred figures, which should declare themselves unmistakably at a distance, and fill the soul of the spectator with devout reverence. To this end, the art of mosaic, quite apart from its singular durability and indestructible strength, was eminently suited; and its very want of adaptability was an advantage, because the type, once secured, was easily held fast without fear of any special innovation, and developed into a distinct canon. To be sure, therein again lay the danger of petrifying into typical formalism, as eventually came to pass in the case of Byzantine art, which split upon this very rock. Even aside from this, the Byzantines could not have escaped from their languid formalism; while, on the other hand, Italian art of this time gave proof of a depth and vital strength of feeling which cannot but make itself evident even within the bounds of the technical difficulties of mosaic.

The strict architectonic arrangement of space was a necessary con-

sequence of this mode of artistic expression. The law of arrangement, however, differed widely from the principle which regulated ancient wall-painting. In the early Christian mosaics, the law of decoration, which is all-important in ancient productions, passes into the background, and gives place to a strict harmony of forms. These balance one another like different parts of an architectural structure, fully occupying the space at command with their massive proportions. There is a rigidly preserved unity in their order, their pose, and their relative position, producing an effective and dignified impression. Ornamental details are used but sparingly; and where the ancients sought to divide up minutely the flat surface of every wall or niche by elegant adjuncts, imitation of architectural forms, and festoons, the great surfaces of the apses and triumphal arches are here treated as a whole, and as such inclosed in an ornamental framework. Only the great extent of surface in the clear story of the nave seems to call for a division of parts, which successfully repeat the effect of the harmonious arrangement of the arcades.

Through all these elements, early Christian mosaic acquires a character of simple grandeur and sublimity, certain of its independent artistic effect. In the impression made by these qualities, it is of little consequence that much remains to be desired in the formal treatment of the figures, and that the artist is deficient in a knowledge of the physical organism and the play of its parts. One is still strongly reminded, in essentials, of that dignity which the Roman antique knew so well how to impress upon its senatorial figures; and even in drapery, posture, and action, ancient art long remained the guide which the Christian mosaic pictures followed. A special definiteness and variety of characteristics is observable in the heads. Christ is represented as the catacomb pictures had shown him, except that the expression of his head is more impressive, graver, and more earnest—more like that of a mature man.

The range of representation is a narrow one: Christ with his saints and apostles, as well as with the Ancient of Days of the Apocalypse; also the Madonna and Child, frequently surrounded by angels. To these may be added a few symbolic figures—the lamb, the palm, the cross, the peacock, and so on. The whole story is told with a very few touches; but the appearance of reality is the last thing that is considered. The persons represented tread on a blue ground, or float on clouds; only in rare instances the ground is green and colored flowers are suggested.

The chronological sequence of the monuments shows, in the case of the mosaics, a series of transformations and variations of style; as a result of which follows, however, not a higher development, but

a gradual decay, until finally, at the end of the sixth century, deteriorated Italian art is replaced by the typical forms of the Byzantine. The most ancient mosaics which have survived to us are those which exist on the wall of Santa Costanza in Rome, the burial-chapel of the daughter of Constantine. Here are branches of grape-vine in the manner of ancient art, but evidently—as on the sarcophagus of Constantia—employed to embody Christian doctrine. The execution, it must be admitted, is formal and crude. In the same style are the rich wall-mosaics in the Chapel of San Nazario and San Celso in Ravenna, the burial chapel of Galla Placidia, designed in the early part of the fifth century. Here are magnificent clusters of grapes, interspersed with symbolic forms—such as the heat, referring to the soul thirsting after righteousness. Other impressive forms, such as the Good Shepherd, belong to this category.

The succeeding period shows a still further departure from symbolism, and in its stead an increase in the power of representing the human figure, with costume, the whole treated in a very effective way, and with a noticeable deepening of the characteristics of painting; as, for instance, in the remarkable mosaics in the baptistery of San Giovanni-in-Fonte at Ravenna, built in the first part of the fifth century. The baptism of Christ occupies the center of the dome, surrounded by the figures of the apostles, the whole encircled by profuse ornamentation which is more or less interspersed with symbolic designs; the entire subject treated in a style of solemn grandeur, and carried out with wonderful splendor of color.

The masterpieces of the latter part of the fifth century were the mosaics on the wall of the triumphal arch in San Paolo outside the walls, near Rome, which have been restored, since the fire of 1823, in accordance with remains and drawings. The colossal torso of Christ towers in the center, in a medallion; extremely impressive, though with a terrible and unlovely expression. Above this are the symbols of the evangelists, which even then were established; as the angel, the eagle, the ox, and the lion. Arranged in two rows on either side are the twenty-four elders of the Apocalypse, in white robes, with crowns in their hands, bending adoring knees. There is little difference between these figures—the motive is limited; but, nevertheless, the conception of the whole is exceedingly significant. About half way down, on a similar space on the sides of the arch, are the two apostle-princes, St. Peter and St. Paul—the former designated by the key, the latter by the sword. The line of division between the two groups is effected with all imaginable simplicity by means of a horizontal line drawn under the row of the elders. Rolls containing inscriptions constitute the frames, which are without

further decoration. Thus does the rich play of fancy of antique decorative art give way before the earnest severity of pictorial representation.

The mosaics in the apse of the Church of San Cosmo and San Damiano may be regarded as the last—as they are certainly the most splendid—in the series of great mosaics of that early period in Rome, and belong to the years 526-530 (Fig. 259). The figure of Christ is presented at full length on a blue ground, supported by colored

Fig. 259. Mosaic in the Church of SS. Cosmo and Damiano. (Rome.)

clouds, carrying a mantle on his left arm after the ancient fashion; in his left hand a roll, while his right hand is outstretched expressively, as though in solemn command. On both sides six figures are symmetrically arranged—five saints and Pope Felix IV., the patron of the work. These figures, with the exception of the latter, which is a restoration, are admirable instances of a style formed upon antique models, although, perhaps, become a little stiff. The earnestness of the heads, the repose of the attitudes, and the superb grouping give a character of great solemnity to the whole such as is expressed by no other work of the kind in so great degree. Beneath this representation a broad frieze is drawn, on which are lambs, the

symbolic representations of Christ and the apostles. On the wall surrounding the tribune may still be seen traces of angels and of the elders of the Apocalypse.

At the beginning of the sixth century the last relics of the ancient social order in Italy had been so entirely destroyed, and life had been so shaken and confused by the changing march of events that Italy was no longer capable of originating artistic work. But a new culture had sprung up in Byzantium, which attained to its highest pitch of splendor under Justinian. Its foundations rested upon antique principles; but it had, besides this, derived a decided coloring from the influences of the East and also from a court ceremonial of a very high order of civilization. This so-called Byzantine style, from this time forth, began to exert a profound influence upon the Christian world. Italy was especially subjected to this influence from the fact that she had been subjugated to the kingdom of Greece by Narses and Belisarius, and in any case was utterly incapable of exercising spiritual culture and artistic endeavor. It followed that Byzantine art succeeded in producing the precise result which the Church had aimed at accomplishing with her splendor of external representation; that is, a canon of forms and figures already elaborated, and having all the advantages of a completely mastered technique, worked out in magnificent materials. At this period the division, arising from difference of dogma, between the Eastern and the Western Church, had not yet taken place; so that Byzantine art met with no opposition, even from this quarter.

The central idea of Byzantine art is a gorgeous execution, kept within bounds by the fixed laws of the Church. Not only did the Oriental feeling demand the most costly stuffs, as well as pearls, gold, silver, and jewels, for the decoration of altars, of chancels, and of shrines—a custom which speedily spread throughout all Christendom, and instituted an extraordinary transformation in the construction of ecclesiastical edifices—but also, dating from this period, a gold ground was commonly employed in mosaics, in the place of the blue ground formerly in universal use. By the small, almost innumerable bits of which these great wall-pictures were composed, the light was now broken up into countless reflections, which gave an incredibly brilliant effect. In this way the gold ground itself sparkled, and also changed in color and intensity in larger surfaces, and figures represented stand out in bold relief, in their symmetrical strength, from this background. Nor did the simple coloring of early Christian art, with the ancient garment of white forming its most elaborate costume, any longer suffice; on the contrary, there was taken as a model

a rich, gay court costume of the prevailing fashion at a luxurious Oriental court, often overlaid with gold and other ornaments in elaborate patterns.

Nor was the influence of the splendid ritual less marked in the disposition and arrangement of the figures than in their dress; and though a statuesque calm was aimed at in the early Christian art adopted in the West—an effect of solemn withdrawal from the ordinary things of life—this tendency, when under the influence of the outward forms that marked the Church in Byzantium, crystallized into mere formality limited by rule and line. Even the laws of physical development were made to yield to this effort after external dignity and sublimity; and the human form is made to assume a disproportionate length far beyond that of its natural proportions for the sake of producing a more powerful impression. In accordance with this idea, an effort is made to give to the faces an expression of grave and dignified composure; but it generally only succeeds in making them harsh, gloomy, and unamiable. A narrow oval face, large eyes—often set quite obliquely—a long, thin nose, a pinched mouth, and a narrow chin are the ordinary characteristics of the Byzantine countenance; to which are usually added a gray head and beard, generally trimmed and arranged in the conventional and prevalent court-fashion. Bound to these forms and laws of an external ceremonial, Byzantine art soon grew stiff and rigid, and offered a new proof that real original development can only proceed from a true spiritual life, and that mere dogmatism is death to intellectual progress. But as that which is so firmly and dogmatically fixed is most easily handed down from one to another, and we are too apt to go to formulæ and external rules for our instruction, it was just what was formulated and accurately limited in this art which tended to recommend it. Particularly when its technical forms became perfected by long practice, its work tended more and more toward delicacy of execution, while its value as decoration was never lost; and later artists began to beautify its austere type with noble inspirations. Especially is this the case in miniature painting, which long preserved many beautiful and expressive traces of the ancient spirit.*

As for the subjects treated the new design goes far beyond the limitations of early Christian art. The principal theme is generally

* A series of fine examples will be found in J. Labarte's "Histoire des arts industriels." See also Middleton, J. H., "Illuminated Manuscripts in Classical and Mediæval Times." Shaw, H., "Illuminated Ornaments of the Middle Ages." "The Art of Illumination." Silvestre, "Paléographie universelle." Westwood, J. O., "Palæographia Sacra Pictoria."

Christ triumphant, and judging the world, surrounded by his angels, the apostles, the saints, and the Madonna as queen of heaven—all severe in bearing, and solemn in their calm repose. But Byzantine art, guided by imperial influence, often adds pictures of worldly ceremonies, in which the emperor with his retinue appears in the full splendor of court costume. The purely historical seldom appears; and the representations of life are without any pretension to

Fig. 260. From the Mosaics of San Vitale. Ravenna.

dramatic animation. The purpose of the work is symbolic and decorative, nor has traditional art been carried further in these two respects.

The earliest and most important works at Ravenna, dating back before 550, are in the tribune and the choir of San Vitale. In the vaulting of the apse, Christ, enthroned amid his saints, still wears a youthful form, as early art always represents him; but the golden background indicates the transition to the Byzantine style—an indication which is decisively confirmed by the gorgeous pictures of state ceremonial on the lower wall of the chancel. Here we see the

Emperor Justinian, and opposite his consort Theodora, both in magnificent court costume, and surrounded by their suites, by spiritual and temporal dignitaries, and a bodyguard, all depicted in the act of taking part in a solemn religious procession. (Fig. 260 gives part of the empress's retinue.) Scenes from the Old Testament, most of them symbolical of the sacrifice of the New Covenant, are portrayed upon the choir walls, rather meagerly executed upon dark ground, and surrounded by symbolical figures and emblems. Among the scenes given are the Sacrifice of Abel, Abraham with the Angels, Abraham and Melchisedec, Abraham's Sacrifice of Isaac, and others of like nature. The extensive mosaic frieze in the central nave of S. Apollinare Nuovo belongs to the same period. Processions of saints and martyrs—the men on the left, the women on the right hand—are issuing from the cities of Ravenna and Classis, and moving in long procession toward the altar, filling in admirable order all the spaces between the arcades and windows, and following the lines of the colonnades toward the holy of holies. The effect is throughout lofty and sustained, carrying out the main idea suggestively and happily.

The mosaics with which S. Sophia at Constantinople was adorned, probably about 560 A.D., are, however, the most extensive work of this epoch. The pictures in the choir and the great representation in the dome of Christ judging the world have disappeared. The remaining mosaics are well preserved under the whitewash with which Turkish orthodoxy has covered them; on the occasion of some repairs, about the middle of the nineteenth century, they came to light, and were copied, and they can now be seen in part. Thus in the pendentives of the great dome, fantastic figures of cherubim, with their threefold pairs of wings, admirably fill the spaces. On each side of the walls of the drum, beneath the dome, saintly bishops and prophets are ranged between the windows. In the arched vaulting of the gallery, among other remains there is a Descent of the Holy Spirit, conceived on a grand scale; and finally, in the vestibule, in the arch panel of the chief entrance door, there is a Christ, seated upon a fancifully adorned throne, beside him medallions of the Madonna and the Archangel Michael, while at one side of the throne an emperor in magnificent costume kneels on the ground in an Oriental posture of devotion, possibly Justinian himself (Fig. 261). This figure shows most clearly the rigid type of this school of art, with its rejection of free movement; while in the other figures there is a hint of antique influence, though of degenerate kind.

From this time forth, the influence of Byzantine art spread irresistibly throughout the West. There are, indeed, isolated works in Italy, which, without a marked impress of Byzantinism, repeat the early Christian school of painting in a crude, barbaric way; but the predominant character rests upon the Byzantine form—rigid in type, almost like a servile copy, and constantly growing more lifeless and dreary. The first works of any importance from the latter part of the seventh century (671-677) are the mosaic pictures of Sant' Apollinare in Classe, at Ravenna. The altar apse follows the model of S. Vitale in its representation of Old Testament scenes, as well as in a picture of a solemn ceremonial. A number of early Christian symbols are introduced in the main nave, between the arcade arches,

Fig. 261. Mosaic in the Vestibule of S. Sophia.

by way of suitably filling up the space; above these extends a frieze of medallions of the archbishops of Ravenna, which aids in giving an original and varied arrangement to the flat surface. In Rome, the apse of San Teodoro displays a mosiac of the same century, in which there is a repetition of early Christian models, especially pictures of SS. Cosmo and Damiano; while the mosaics in the apse of Santa Agnese (625-638), on the other hand, appear to be Byzantine in tendency, and are remarkable for the circumstance that the patron saint of the church himself appears, between two other saints, in the place usually assigned to the Saviour or to his mother.

Another most striking mosaic picture, from the apse of the Triclinium Lateranensis (the refectory of the old Lateran Palace of Leo III., in 800), was removed at a later period to the chapel of the Scala Santa. In the apse Christ appears standing, and

surrounded by his apostles. In his right hand he holds the book of life, while with the left he delivers the symbols of supremacy to Peter, who stands nearest him. This idea is further carried out upon the two wall surfaces beside the apse. To the right, the Lord is represented as conferring the keys upon Pope Sylvester, while he bestows the banner with the cross upon the Emperor Constantine; to the left, Peter awards a stole to Leo III. and a banner to Charlemagne, as symbols of spiritual and temporal power.

The mosaics of San Prassede are among the most extensive remains of this period. In the apse Christ appears, surrounded by six saints; while beneath is a frieze on which lambs are depicted; and on the walls of transept and triumphal arch are seen the evangelists and the elders of the Apocalypse, surrounded by angels; the whole being, in short, a repetition of the early Christian school of painting, only smaller in proportions, and with a Byzantine hardness of expression. Besides these, the little chapel of S. Zeno is a perfect specimen of mosaic decoration of this period.

Outside of Rome, the mosaic work in the apse of Sant' Ambrogio, at Milan, is a valuable work of this epoch, though it has been to a great extent restored. In the center, a singularly rigid figure of our Lord is enthroned between the archangels Michael and Gabriel on one side, and the Saints Gervasius and Protasius on the other—these latter not without a certain solemn grandeur of aspect. Angels hover above, in the act of crowning them. To the right, the city of Milan is seen, with Saints Ambrose and Augustine seated at reading desks; to the left the City of Tours, where Ambrose is conducting the funeral service of St. Martin. The coloring, especially in the draperies, is bright and gaudy. The whole execution is crude, and the composition somewhat confused and disordered.

The important architectural enterprises of Charlemagne falling in this epoch, a fine opportunity was afforded for the use of wall decoration. Unfortunately, nothing remains of these works; but we know that the colossal figure of Christ enthroned, and surrounded by the Apocalyptic elders, on a background of gold with red stars, filled the dome of his minster at Aix-la-Chapelle; that the Basilica at Ingelheim was adorned with scenes from the Old and New Testament; that the palaces at the latter place and at Aix boasted of frescos portraying the history of the Frankish Empire and of the reign of Charles—an indication that here, perhaps, in spite of rigid form and Byzantinian presentation, a breath of fresh vitality and independence had begun to permeate art.

The style of the mosaics executed in the second half of the ninth

century in S. Sophia at Constantinople testifies to the state of art in Byzantium at that period. They represent a bust of the Madonna, framed by other sacred figures, in the severe formalistic treatment of later Byzantine art, but not without dignity and even a certain austere grace. A revival of the older types may be observed in these and kindred works—a revival which ushered in a new era, though only one of external development, following upon the intermediate stage of that violent iconoclastic controversy which ended with the rejection of sculpture and the acceptance of painting. The study of the further petrifaction of this art, until it finally degenerated into mere lifeless imitation, can be of no possible interest to us.

Fig. 262. Chair of Bishop Maximianus. Ravenna.

Beside these great lasting works, a series of minor productions in the artistic handicrafts may be traced through the different periods of the early Christian epoch, an idea of which is requisite to complete our survey of the gradual development of early Christian art. First in order comes the work in ivory, which constituted a most important article in ecclesiastical as well as worldly luxury in Byzantium. The consular diptychs—small double tablets fastened together, the inner side intended to be used for writing, while the outside was adorned with carved work—used to be given as presents, in great quantities, whenever a new consul came into office; and many specimens of them are still extant. They usually display the image of the consul in the act of giving the signal for the beginning of the public games. The most ancient official diptych in existence, it is supposed, is one in the Imperial Library at Berlin, but this is not "consular;" and several in the British Museum are thought to be of the third century, their exact purpose being unknown further than that they are highly adorned tablets for writing. The Imperial Library at Paris owns a tablet of Flavius Felix, 428 A.D.; and there are two in the treasury of the church at Monza. That of Areobindus, in the town library

at Zurich, is of 506 A.D.; and another in Paris dates from 517. These tablets were subsequently employed as decorations for the costly bindings of books used in the churches; many were destroyed and lost in this way; other tablets were then carved especially for book covers, and from this originated the custom of adorning such minor works of art with scenes of religious significance. The Byzantine productions of this kind are remarkable for neat and elegant technical execution, and for many lifelike traits. The most magnificent work in ivory which has come down to us is the throne of Bishop Maximianus, in the sacristy of the Duomo at Ravenna, assigned to

Fig. 263. The Emperor Lothair and Charles the Fat. (Frankish Miniatures.)

the year 550; it is entirely covered with carved plates of ivory, a splendid piece of sumptuous decoration (Fig. 262). Among the relievos, those on the arms, descriptive of the history of Joseph, are designed with a good deal of the antique spirit. The vinelike friezes, too, exhibit much natural freshness, with their lions, deer, peacocks, etc.

After these, an important place must be assigned to the illuminations in the parchment missals of the time. Even this kind of art seems to be based upon ancient prototypes now lost, as is evident from the illuminated manuscripts of Virgil and Terence in the Vatican Library, and those of Homer in the Ambrosian Library at Milan—copies of antique compositions, though with an ever increasing degeneracy of style. The sacred writings of the Christians,

notably those of the Old Testament, began to be illustrated in a like manner at an early date; for example, the parchment roll, thirty-five feet long, in the Vatican Library at Rome, with representations from the life of Joshua; the manuscript of the first eight books of the Old Testament in the same library; and the manuscript of Genesis in the Imperial Library at Vienna, probably of the fifth century. The influence of the antique can clearly be traced everywhere in these works, both in conception and treatment, even to the minor details of the work.

In later periods, the Frankish illuminations, especially, confirm the impression that the methods of antique art were revived for the last time in such productions, although through the medium of a rigid Byzantine interpretation, and with a somewhat barbarous style of treatment. A solid richness of execution accompanies it, analogous to the architectural productions of a similar school and epoch. The earliest works of the time of Charlemagne are also the most vigorous, as is shown by several manuscripts in the town library at Trêves and in the Royal Library at Paris. Other works, to be found in Paris, and executed for Louis the Pious and Charles the Bald, already give evidence of a decay of artistic power; particularly a copy of the Gospels of the Emperor Lothair, preserved in the same place (Fig. 263 *b*). A still more decided degeneracy and rudeness is exhibited in works of the time of Charles the Fat, as proved by the richly ornamented manuscripts of the Vulgate of St. Calixtus, now in the Benedictiue Monastery of San Paolo at Rome (Fig. 263 *a*).

Besides the Frankish illuminations of this late period the Irish productions deserve special prominence, as presenting a strong contrast to the style founded on the antique, and bringing, for the first time, a distinctly Northern national element into Christian art. They are, however, of such a curiously fantastic description, and admit such singular deviation from the laws of organic development, that they distort the lines of the human form into a mere combination of chirographic twists and turns, and tangle it in ribbon-like mazes, mingled with fanciful ornaments of snakes' and dragons' heads (Fig. 264). A perfect wealth of inventive power seems to be solely used to obliterate all traces of the natural development of the human organism, causing the lines of structure to deviate into all kinds of novel and curious complications. The oldest work of any importance illustrating this tendency is found in the evangelarium of St. Wilibrand, of the beginning of the eighth century, in the Paris Library. The illuminations of the so-called Cuthbert Book, an Anglo-Saxon evangelarium in the British Museum at London, belong to about

the same period. A good many other specimens, from the eighth to the tenth century, may be found in English libraries, as well as in the former Monastery of St. Gall, which was a colony of Irish monks.

The illuminations of the Anglo-Saxon school occupy a prominent position between the Frankish and Irish productions, adopting the fantastic methods of the Irish artists, though limiting it to the decorative adjuncts, and following in the symbolic figures the Byzantine conceptions then in use.

Fig. 264. Irish Miniature.

The Byzantine illuminations of this closing period give evidence of a surprising advance in mere technical skill. While their execution carries the neat and delicate elegance of this school to its highest state of perfection, the conception of figure and form betrays a decided reaction toward antique types, often reproducing them in a wonderfully spirited and attractive manner. We find again all the ancient personification of mountains and rivers, of mental conditions and moral attributes, often combined with freedom and vivacity of movement, which is only occasionally limited by deficient knowledge, or by conventional exaggerations of form. Among the numerous works of this description still to be seen are a manuscript of the sermons of Gregory of Nazianzen, dating from the ninth century, in the Paris Library, and an illuminated manuscript of Isaiah in the Library of the Vatican, from the close of the century following. A gradual decline in technical skill and in conception begins with the eleventh century, and the sinking Christian civilization of the East left all such art work to the narrow world of the monastery, though sometimes we encounter isolated works at later periods in which the traditions of ancient art are pervaded by a loftier energy.

The decorative work intended for the adornment of the sanctuary and the utensils employed in divine worship should be mentioned in conclusion, as especially indicative of the spirit of this epoch. It has already been observed that the Byzantine love of pomp delighted to make use of the most costly materials—precious metals, pearls, and gems—for such purposes. We are told of the Church of S. Sophia at Constantinople that the choir was screened off by silver columns and rails; that the golden altar, richly set with

precious stones, was crowned by a lofty silver tabernacle; and that hangings embroidered with gold veiled the openings between the tabernacle pillars. This love of splendor, beginning at Byzantium, quickly spread over Western Christendom. Everywhere the churches vied with each other in the costliness of their furnishing; everywhere the supreme desire to display the most sumptuous material resulted in subordinating artistic workmanship to the material employed. In the beginning of the ninth century, when, through the liberality of the Carlovingians, the bishops of Rome had come into possession of worldly power and an extensive realm, the churches in

Fig. 265. Crown of St. Stephen of Hungary.

Rome especially had a profusion of decoration lavished upon them. The Church of St. Peter was fitted up with a costly magnificence that defies description. The doors were overlaid with silver plates; so also the pavement before the crypt of S. Peter, and the cross-beam beneath the triumphal arch; while the crypt itself was paved with plates of gold, not to mention countless utensils in gold and silver, and lamps and candelabra, altar vestments and images, of the same precious metals. Although figures in relievo and sculptured ornaments of different description were of frequent occurrence on these articles, the impression they made was more picturesque than plastic; and the combination of various precious metals, pearls, and variegated gems, added to the frequent ornaments in exquisite enamel proved the delight that was felt in glowing effects of color. The frontal of the high altar of Sant' Ambrogio at Milan—dating

from the first half of the ninth century, and ascribed to a certain Master Wolvinus—and the Pala d'Oro of St. Mark's in Venice—made at Constantinople in the eleventh century—give some idea of these magnificent objects. The so-called Dalmatica of Charlemagne, in the treasury of St. Peter's at Rome, may be mentioned as a specimen of the gorgeous vestments of this period, as it certainly does not date back farther than the twelfth century.

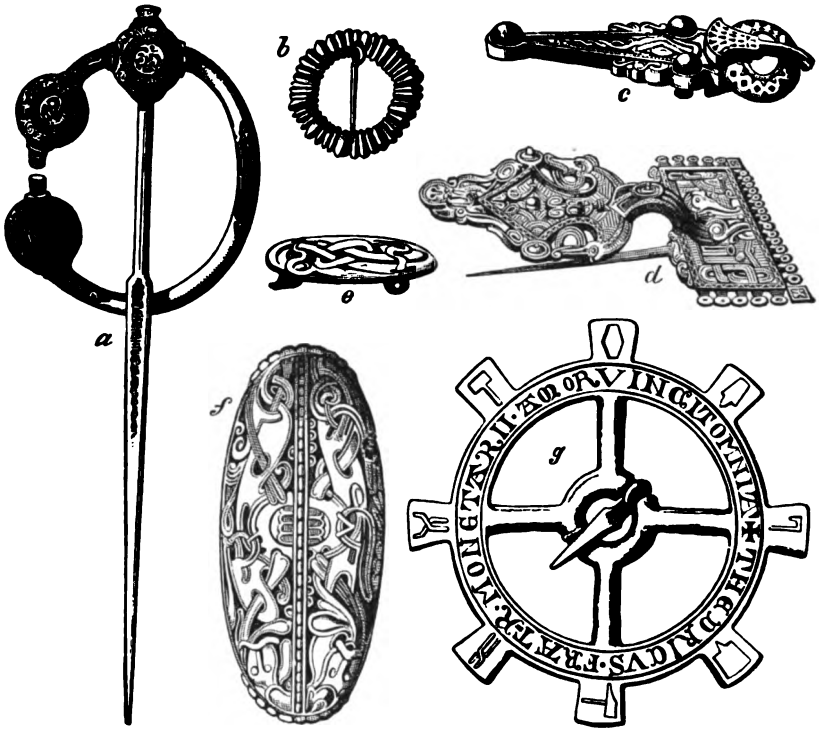


Fig. 266. German Pins and Brooches.

The same love of pomp soon spread among the Northern peoples —the German, Slav, and other nations—not confining itself to ecclesiological purposes alone, but also entering into the needs of secular life. Byzantine art, with the advantages of technical perfection and splendor of its goldsmith's work, was admirably fitted to satisfy all such demands; and it was well calculated to enchant the eyes of the half-civilized peoples who were crowding upon the borders of the Empire by its use of pearls and gems, colored enamels, and *nielli* (metal inlaid with ornaments or figures in black), as well as by its filigree work (metallic threads of great delicacy soldered

in an infinite variety of patterns), producing a rich polychromatic effect, conceived after the model and in the spirit of old Eastern art; pleasing the barbarian with these, just as it still affords the keenest pleasure to the cultivated taste by the harmony of its effect and the skill of its masterly execution. The crown of St. Stephen of Hungary, the first Christian king (Fig. 265), carefully preserved in the Royal Palace at Ofen (Buda), on the right bank of the Danube, is a specimen of the work in question. To all appearances, the golden hoop at the base, with the battlement ornaments above, forms that part which was sent to Hungary in 1075 as a gift from the Byzantine emperor, Michael Ducas; while the perhaps more ancient crossing arches, with the rest of the upper portion, were doubtless a later addition. The circlet is a most superb piece of workmanship, in true Byzantine style, set with sapphires alternating with enameled decorations. The crown, supposed to have been Charlemagne's, in the imperial treasure chamber at Vienna, is a similar production of Byzantine workmanship.

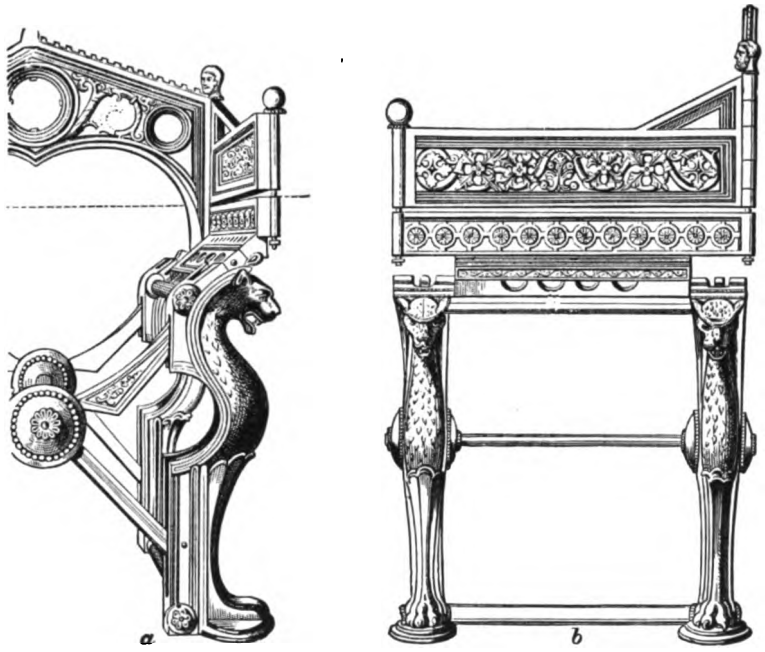
In the case of the Northern nations, however, this Byzantine art is connected with an original, individual decorative style, the earliest examples of which we find in the many bronze, gold, and silver utensils and ornaments discovered in Germanic and Celtic tombs. A great quantity of such objects have been found in Germany, Switzerland, England, and the Scandinavian North, which must be assigned to the epoch extending from the downfall of the Roman power to the Carlovingian age. We have already met with a suggestion of this Northern tendency in art in the Irish illuminations, though it is true that these furnish a most extreme and one-sided illustration. Nevertheless, the same order of taste, even apart from these exaggerations, was common to all the Northern nations—to the Germans as well as the Celts—and called forth productions in the field of artistic handicraft to which we cannot deny a certain ornate fascination and the merit of original conception. This style is particularly well exemplified in the personal ornaments—diadems, necklaces, and bracelets—which it produced, especially in the large pins (*fibulæ*) used for fastening the mantle upon the breast or shoulder, and in the various brooches and belt-clasps. Their shapes are generally imitated from Roman models; but, in ornamentation, a style predominates that is so far a departure from the antique as to be almost the opposite of it. While the antique aims at a fine plastic development, adapted to a massive sculptured decoration, in imitation of natural objects—such as leaves, flowers, and figures—these Germanic ornaments incline to a form with many flat surfaces, adapted for decoration of a more grotesque character. Every variety of

geometrical figure—curves, points, zigzags, circles, and spirals (Fig. 266 *c, d*), was brought into play for this purpose; though most frequent use was made of those twistings and windings of scroll-like ornamentation which play so conspicuous a part in the Irish manuscripts. The primitive craft of plaiting ribbons or thongs is evidently the origin of this design; though its surface character, strictly adhered to, shows that the style was first introduced into the realm of art through wood carving. The speculative character of Northern nations, their delight in anything fantastic, their predilection for combinations which should give expression to their subjective mood and disposition, evidently gave rise to this tendency, with its capacity for infinite variation, leaving the inventive genius the utmost liberty; while the realm of natural organism, on the other hand, restrains the creative faculty by its fixed laws. When snakes and birds, heads of men or animals, are occasionally brought in, it is done in a fantastically capricious way, as an altogether subordinate portion of the whole.

Fig. 267. Gold Tankard from Nagy Szent Miklós. (Vienna.)

The technical skill and the traditions of Byzantine art began to be employed upon this ornamental style as the Northern nations attained a certain capacity for culture, and came into closer contact with the ancient civilizations, especially as represented by Byzantium. Whether Byzantine artists endeavored to assimilate this Northern taste, or Northern goldsmiths appropriated the Byzantine technical methods, amalgamating them with their native ideas of form, the fact remains, that in many different places, from the Rhenish provinces deep into the steppes of Hungary and Roumania, ample and most certain proofs have been found that this combination did take place. They offer a visible commentary on the accounts of contemporaneous writers, who could not say enough of the absorbing passion

for gold, costly raiment, and barbaric pomp. The ornaments of the Frank king, Childeric (died 481), found in his grave at Tournay, and preserved in the Louvre, are of this description; and so are the Merovingian golden ornaments of Wienwerd, now in the Museum at Leyden; the treasure of Gourdon, which probably belonged to the Burgundian monarch Sigismund, now in the Museum of the Louvre; and, above all, the magnificent treasures of Guarrazar, near Toledo, found about 1860; a part of which have also found their way to Paris, and are in the Cluny Museum. The principal pieces in the last-named collection are several golden crowns, designed to be sus-



a, Front view of one-half of Throne; *b*, side view.
Fig. 268. The Throne of Dagobert. Louvre.

pended over the altars, one of which bears the inscribed name of Receswinth, king of the Visigoths (died 672). Similar objects discovered in the same place, among them a crown with the name of King Svinthila, found their way into the royal collection of arms at Madrid.

Some recently discovered treasures in more easterly provinces fairly rival these Western remains, displying the same decorative motive—the whimsical contortion of lines, the heads of birds and snakes—combined with the use of colored glass and with precious stones.

As specimens, we may name the ornaments in the Museum at Pesth, discovered on the Puszta* Bakod, and those dug up some time since at Petrossa in Wallachia, in the Museum of Bucharest; especially, however, the so-called "Treasure of Attila," found at Nagy Szent Miklós in Hungary in 1799, now in the Imperial cabinet of antiquities in Vienna,† comprising no less than twenty-three gold vessels, with a total weight of 1678½ ducats; splendid specimens of embossed work, with remnants of decoration in enamel, richly adorned with figural and ornamental representations, in which antique reminiscences, Oriental influences, and Northern barbaric elements are curiously blended (Fig. 267).

Fig. 269. Tassilo's Goblet. Kremsmünster.

That there was no lack of native workers in gold, capable of producing all these splendid objects, is evident from the history of St. Eligius, who, in the seventh century, served the kings Dagobert and Clotaire by his artistic labors; and whose virtues not only raised him to the rank of a bishop, but made a saint of him as well. Since he is said to have made a golden seat for the first-named king, the conclusion has been arrived at, without any further foundation, that the chair preserved in the Louvre — originally from the Abbey of S. Denis, and described, according to an old tradition, as the throne of Dagobert—is the very one that came from the hands of St. Eligius. However that may be, this exquisite piece of bronze (Fig. 268) is an evidence of the artistic skill of the period and at the same time of the still vital influence exercised by classic ideas; for the shape of the folding stool, and the noble modeling of the whole, especially the

* Puszta, the great Hungarian Plain.

† Published in the work by Arneth, and again, with due regard to all works of the same kind, in J. Hampel's "Der Goldfund von Nagy Szent Miklós"; Budapest, 1886.

supports formed like panthers' heads, follow ancient tradition, while the only original motive is found in the ornamentation of the back and arms.

Another production, bringing before us the metal work of the Carlovingian epoch, is still more remarkable. This is the chalice belonging to the convent at Kremsmünster in Upper Bavaria, with an inscription representing it as a gift of Duke Tassilo, who, as he was deposed in 788, must have founded the monastery before that date. The chalice is of copper, with inlaid work of silver *niello*. At the foot are the half-figures of four saints, while on the upper portion Christ and the evangelists appear; all the intermediate spaces being filled in with line patterns and intricate scroll work, while fantastic images of dragons decorate the upper rim (Fig. 269). This style of ornament, as well as the barbaric crudeness of the figures, betrays the hand of a native artist, affected by the artistic influence of the Irish monks, just then potent in Southern Germany. The Lombard master who, somewhat later, executed the ciborium above the high altar for Sant' Ambrogio in Milan, already mentioned, was more moderate and more in accord with antique traditions. But even he delights to make use of the Germanic scroll and braided decorations in the ornamental setting of his work—a new proof of the still-existing strife between ancient methods and the Germanic tendency of idea, an artistic mean between them not having yet been discovered.

If we survey early Christian art as a whole, it cannot be denied that, upheld by a fresh inspiration, it starts vigorously on its course, creates grand fundamental forms, and produces a new world of ideal subjects; but, losing its force too soon, degenerates alike in spirit and performance dragged down by the growing barbarism of the people, the loss of national life, and the breaking up of the antique social order with no new system to replace it. The civilized nations of the ancient world had exhausted themselves; and it was out of the question for them, even under the inspiration of a new religious idea, to shape out a radically fresh life. Yet they were able to produce, as types for the future, a plan for churches suited to ritual worship, and countless plastic and artistic forms; and that they were able to do this with the means still offered by ancient art is perhaps the most striking proof of its exhaustless vitality. Herein, however, lay the limits of their capacity.

The Germanic peoples had developed too little, as yet, to be able to cast a decisive weight in the scale of artistic progress. Even in political life they fell back upon reminiscences of the Roman ages, as is evident from Charlemagne's restoration of the empire of the

Cæsars; how much greater reason that they should have succumbed in art to the preponderating influence of ancient tradition in its early Christian mold and setting! And even in cases where we notice a first influx of the peculiarly German artistic spirit, it was still too unschooled, too fantastically lawless, to rise to any noble and thoroughly consistent creations. To satisfy the spiritual needs of an independent artistic system, an epoch of a different character was needed—one in which the rule of ancient civilization should exercise a less universal influence, and in which the independent strength of the Germanic races should make itself felt in new political relations. It is the great merit of early Christian art that it established, for that later period, those great fundamental laws out of which was to be developed a creative system of inexhaustible richness and variety.

Chapter II.

MOHAMMEDAN ART.*

1. Character and Artistic Faculty of the Arabs.

MONOTHEISM was to be presented to the Orient in a different form from that in which it was introduced into Christendom. It is true that the East had not been absolutely closed to the Christian doctrine; but numerous quarrels and heresies had soon disfigured its original form, and it was reserved for Mohammed to spread the belief in a single God among Oriental peoples.

From time immemorial, the faith of Abraham had formed a part of a curious mixture of beliefs which prevailed in Arabia and the neighboring lands of Syria and the Sinaitic peninsula. Many Arabs traced their descent from Abraham, while their language, too, belonged to the Semitic group. A rude idolatry, and side by side with it the Chaldean worship of the heavenly bodies, had become generally prevalent; and even believers in the Mosaic and Christian doctrine were not wanting. In religion, as well as in other respects, the people of Arabia were split up into many, and for the most part hostile, races, that wasted their strength in the most bitter feuds. Then it was that Mohammed, with his fiery enthusiasm, fanned the pure ancient faith of his race into a flame, and by strength of conviction and the power of the sword spread it, under the form of a new doctrine, throughout Arabia.

The character of the country and of its inhabitants was favorable to such an enterprise. A rocky, barren plateau, without rivers and without good harbors, Arabia lies removed from the ocean, although surrounded on three sides by arms of the sea. Thus it was that the spirit of its people was not drawn away from home by the pursuit of navigation, but turned naturally to the roving life of the nomad. In the boundless dreariness of the desert, under a brilliant and cloudless firmament in which glowed both the constellations of the northern

* Prisse d'Avennes, "L'art Arabe d'après les monuments du Caire depuis le VIIème siècle jusqu'à la fin du XVIIIème." Bourgoin, J., "Les arts Arabes." Gayet, Al., "L'art Arabe"; "L'art Persan." Lane, E. W., "Manners and Customs of the Modern Egyptians." Lane-Poole, S., "Art of the Saracens in Egypt."

and the southern hemisphere, a type of mind was developed equally capable of fantastic enthusiasm and keen, acute metaphysical speculation. Just as no definite lines mark the horizon of the son of the desert, and no varied configuration of the ground and no rich vegetable world offer a resting-spot for his gaze, the contemplation of which would lead him to establish any laws of form; so, too, his spiritual eye sweeps over a boundless realm, his fantasy dwells on what is formless and limitless, wandering restlessly from one point of view to another without finding that repose which is necessary to the creation of lasting, definite figures.

In this lies an intimate relationship to the character of the Israelite race; in this the origin of that abstract monotheism which was common to both nations from the earliest times, and of that cult without pictorial symbols that became firmly established among them both. That primitive black stone in Mecca—which tradition connects with Adam, and which the Arabs honored long before the time of Mohammed in the holy sanctuary of the Kaaba—was an expression of this worship that renounced pictures; and although, in the course of time, the large number of three hundred figures of idols had gathered about it, the worship of these was, after all, merely a relapse of the surrounding heathen tribes into polytheism—just as the Israelites had succumbed to a similar temptation. But that the belief in the supremacy of an undivided godhead still continued to live in Arabia in the hearts of many, though it had become mixed with Pagan and even Christian elements, only proves more decidedly how necessary a monotheistic religion was to this people.

In the doctrine of Mohammed that religion received more definite and intelligible shape, and exhibited in its essentials, and especially in regard to the belief in a resurrection and an immortal life, a foundation closely allied to that of Christianity; but in its expression it was adapted to the life of the Orient, at the same time more abstract and more sensual than that of the West. The former characteristic was satisfied by the absolute unity of the Divine Being in the religious system of Mohammed; the latter by the acceptation of the fatalistic principle, and by a thoroughly sensual description of the other world, often accepted as literally accurate, however symbolical its purpose. Notwithstanding the fact that a moral direction is not wanting to Islamism, and that bravery, generosity, hospitality, truth, and magnanimity are inculcated in every Moslem, this singular mixture in the religion of Mohammed makes it lack that higher moral consecration which is inherent in the teachings of Christ. Quite in accordance with this was the manner in which the Prophet spread his belief, by calling to his aid not only peaceful

propagandism, but fire and sword, and by exciting the fanaticism of his followers to a bloody religious war. Once carried away by the fiery excitement of religious ecstasy, and tempted by the immeasurable treasures of the empires which were to be conquered, the Arabs burst like a destroying storm upon the decrepit Byzantine powers, as well as upon the effete Oriental empires; and so irresistible was this attack, that at the death of Omar, the second successor of the Prophet (in the year 644), thirty-four years after the first appearance of Mohammed, the possessions of Islam stretched from the Indian Ocean to the Caucasus, and comprised not only Arabia, Syria, and Palestine, but also the great empire of the Persians, Egypt, and the northern coast of Africa. And scarcely a hundred years had passed since the first weak beginnings of Mohammedanism, when it had conquered, besides, the huge region of India as far as the Ganges on the east, and the whole of North Africa, Sicily, and Spain on the west.

When the Arabs overflowed the extensive region, in parts of which a mighty and peculiar civilization had already erected its magnificent monuments, they were still a simple, primitive people, half warlike and half nomadic, and lacking in all higher education. It is therefore no wonder that they yielded to the influence of foreign culture; and thus this influence was especially supreme in all that regarded building and fine art. They themselves no more possessed a national art of their own than did the Israelites, and for the same reason. As a consequence of this, they often made use of Christian churches for their worship, or employed architects from the court of Byzantium to build their mosques. But they refrained from all pictorial representations; and a law of Mohammed forbade their use with no less severity than the tables of the Mosaic law had done. It was not alone the fear of relapsing into heathen worship that occasioned this prohibition; but it was, like their whole inartistic religious system, a result of the abstract bent of mind of the Arabs, as well as of the incapacity of their measureless, wandering fantasy to crystallize into a plastic conception. These sharp contrasts in the character of the Arabs created similar contrasts in their spiritual life. Burning sensuality and severe asceticism, passionate love of action and profound lethargy, follow closely one upon the other. These qualities made them especially inclined to poetical contemplation; and indeed, we find poetical contests among them even in the earliest times, at which their poets related to the assembled people the deeds and the fame of their race; while the poems victorious in these competitions were worked on silk, and hung up in the Kaaba.

The peculiar bent of mind of the Arabs had, on the other hand,

no conspicuous capacity for plastic art. In consequence of the prohibition of pictures—and still more of plastic representations of natural form—all artistic enterprise was confined to architecture. But in respect to this, they adopted, for the most part, the style which they found already existing and in use in their conquered territories. Thus in Egypt they ignored the ancient monuments, and adopted everything from the native or Coptic form of Byzantine art, while in India the Hindoo and Buddhist arts, neither of them wholly foreign to the practice of the time, are found mingled in the Moslem monuments. In the same way as their religion, their style of architecture was a mixture of different elements; and just as the world of their fancy was a restlessly moving and unlimited one, so is their architecture full of fluctuation and arbitrary whim, as if it were

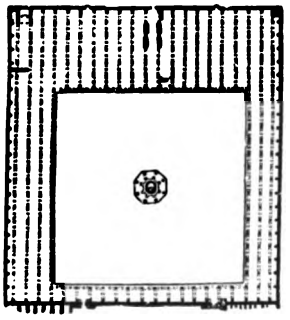


Fig. 270. Mosque of Amru in Old Cairo.

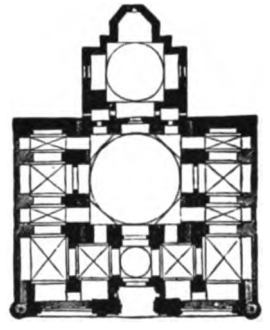


Fig. 271. Mosque at Tabriz.

altogether without laws. That sharply defined type is lacking which can only be produced when the creative faculty, aided by carefully trained study, becomes crystallized in definite forms. Instead of this, the architecture of Mohammedan peoples exhibits exactly the same combination of sharp contrasts which belong to their intellectual nature—bald, dry exteriors with fantastic and over-ornamented interiors; monotonous, dreary masses, and an enchantingly variegated, brilliant ornamentation; a death-like rigidity, and an inexhaustibly rich life.

2. *Mohammedan Architecture.*

The development of Mohammedan architecture had its origin in religious needs, which corresponded, in many respects, to those of Christianity. A special hall (*mihrab*) for prayer, with a separate holy place (*kiblah*) where the Koran is kept, is a first

requisite of every mosque. Connected with this is a large court, with a fountain for the ablutions of the pilgrims. Towers, called in Europe minarets, from whose tops the muezzin might summon the faithful to prayer, were introduced at a somewhat later time; and in many cases, moreover, a mausoleum of the founder is joined to the rest of the building. But Mohammedan art has never succeeded in developing from these first principles any definite and striking model for its houses of worship. If the most important requisites of a culture are satisfied—if, especially, the general direction of the hall of prayer only points toward holy Mecca—great freedom is allowed in the further development of the plan. In spite of this, however, it is possible to reduce the forms of mosques to two types—either those having a large and almost square court, surrounded by corridors that have a greater depth on the side of the interior sanctuary — like the Mosque of Amru at ancient Cairo (Fig. 270); or those built according to the Byzantine model, around a central dome—like that at Tabriz (Fig. 271). The first of these types allows of the effect producible by constant depiction of one form, monotony, a valuable motive of design, and giving a sense of unlimited space within the other is not necessarily less valuable than was the Christian design which it followed; but no new constructive system is exhibited in the artistic execution of these plans. The artistic sense of the Moslem conquerors was not constant enough to benefit architecture much in a constructive sense; while the very mobility of their fancy caused them to add many original devices to architectural tradition. Details were new, if the structure was not. In the halls and arcades demanded by the mosques, a multifarious style of column and pier architecture was employed; but the connection was seldom made by semicircular or segmental arches. Bolder and more complicated forms were more acceptable to their restless fancy; and thus arose the pointed arch, consisting of two united segments of a circle, permitting either a sharply tapering form or a more extended breadth of span, and seen

Fig. 272. Arch at Tarragona.

to be stronger than the semicircular form. The horseshoe arch (Fig. 272) consists of a segment of a circle extending beyond the semicircle, thus gaining in lightness and fantastic spirit, and it was easy to combine these two forms. Finally, we have the four-centered arch, ending in a point (Fig. 273). The partiality of the Orient for rich, flowing, luxuriantly swelling lines shows itself in all these forms.

In covering their structures, they either followed the system of wooden roofs that prevailed in the primitive Christian basilica, or

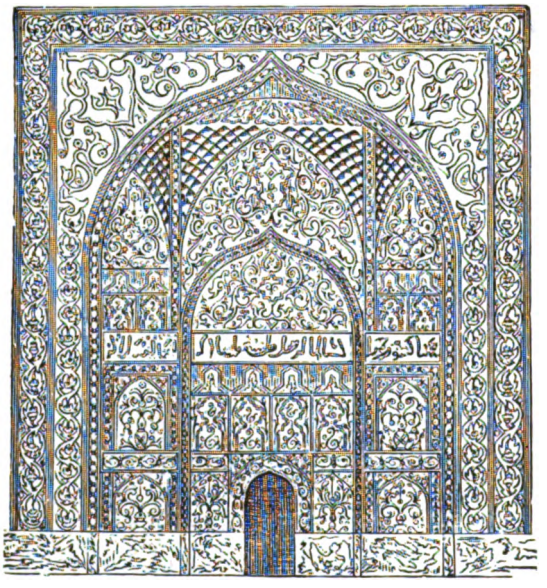


Fig. 273. Portal at Iconium.

the Byzantine system of domes. Domes were employed in connected rows to cover arcades and extensive halls, as well as over the principal room, the fountain in the court, or the tomb of the founder. In all these cases they follow the construction made use of by the Byzantines; and only the form of the exterior, when it is so placed as to be especially conspicuous, has a sharply tapering, or frequently an undulating, convex outline, which, agreeing with the lines of the arch, is a new evidence of the peculiar fantastic tendency of the Oriental mind.

Together with these plain, traditional styles of roofing, there sprang up among the Mohammedans, at a very early date, a form of vaulting that belongs exclusively to them. It had its origin in a group

of separate vaulted niches that ranged in overhanging tiers, combined to form a richly proportioned and brilliant whole, not unlike the cells of bees or a stalactite grotto. They were employed in various ways, especially to fill out the pendentives of the domes and to afford a pleasing transition from a square to a circle; but often the whole sides of arches, and even entire ceilings and domes, consist of these exquisitely fanciful stalactite vaultings. The idea is carried out, in later buildings, in a purely ornamental way, the stalactite corbels and arches being generally made of light material, like plaster and stucco; but their decorative effect, heightened by a variegated wealth of color and by gilding, is all the greater on this account. They are, however, seen to advantage in connection with the entire decorative system of Mohammedan buildings; and it is in this system that the peculiar life of the Mohammedan style consists.

The ornamentation of this style does not, as in antique art, form a part of the development of the real architectural framework, but tends to expend itself upon the decoration of the surface only. The walls are covered with an inexhaustible wealth of charming forms of variegated patterns; so that one is reminded of the gorgeous carpets of the Orient and of the light tents of the nomadic wanderers. The imagination of the Western Asiatic, however, is too mobile and superficial to permit him to conceive and to complete in detail actual material figures, whether taken from the animal or the vegetable kingdom. The forms of plants and animals are treated, as a rule, in a conventional and fantastic manner with all sorts of mazy lines and richly intermingling geometrical figures (Fig. 273). One figure melts into the other; there is that perpetual flight and pursuit, jostling and turmoil of forms, in which the restless fancy and the speculative brain of the race take such delight. Gilding and gorgeous colors, generally in strong, well-defined tints, accompany these caprices of form; their tapestry-like regularity and repetition giving the eye, as it were, a consciousness of repose. This rich system of ornamentation is so arranged, in combination with the general features of the structure, as to follow the lines of the arches; so that the frieze-like stripes formed by the decorations give a frame and border to the arched openings, while sometimes the whole surface of a wall is surrounded by such intertwisted patterns. The separate openings in the arches also have rectangular borders of richly designed patterns; so that, although no severe constructive law is apparent, there is a kind of system, a certain graceful proportion, that maintains law and order in this bright play of ornament. All the wall surfaces, the intrados of the arches, the borders of the separate arches in the arcades, and

the frame that encloses them (see Fig. 273) are covered with this brilliant decoration; and among them are scattered numerous passages from the Koran and the poets in the plain, sharply defined Kufic character, or the fantastic letters of the later Arabic running hand, so arranged as to form friezes and frames, and to delight the eye as well as to satisfy the contemplative mind. All this richness adorns the interior only. The outside is generally treated with severe simplicity; so that a sharp contrast is apparent also in this matter. Yet the architecture of Islam knows how to produce a vigorous artistic effect, when this is necessary, even in exteriors, by means of lofty niches at the sides of the portals, which are often richly ornamented by fantastically shaped finials, and occasionally by open corridors or stately domes.

3. Its Monuments.

A.—IN EGYPT AND SICILY.

All that has been preserved of the most ancient monuments of Moslem architecture in Palestine and Syria gives evidence of the uncertain and dependent condition of this still youthful art. Thus the Kaaba at Mecca is thoroughly primitive, and built after an entirely archaic fashion; while the Mosque El Aksa, on the Mountain of the Temple at Jerusalem, which originally had five, and afterward seven, naves, imitates in its essential features the model of Christian basilicas, although with the addition of a small cupola at one end. And this is likewise the case with the great Mosque of Caliph Walid at Damascus, which is considered an imitation of the former. These two are of the first century of the Mohammedan era, which begins with the Hegira, the flight of Mohammed from Mecca to Medinah, 622 A.D. The so-called Mosque of Omar—that is to say, the Sachra-Mosque (Kubbet-es-Sahra) at Jerusalem, built by the Caliph Abdelmelek, in the year 688, on the site of Solomon's Temple—must be regarded as one of the most important works of this early period. As we now see it, the design is of the ninth century A.D.; for the restorations by Saladin after the Christians were finally expelled (1187 A.D.) may be thought to have changed the artistic character of the building. It seems to be, at least, possible to detect Byzantine influence in its model and construction. Around the celebrated rock with the "noble cave" there extends a rotunda 66 feet in diameter, the modern wooden dome of which, together with the upper walls, is supported by twelve Corinthian columns and four piers placed between them. A broad

Mosque of Omar at Jerusalem. A building of the eighth century, completed in the ninth century by the Mohammedan conquerors of Syria; many old columns and capitals were used, however, in its construction. The building is also called The Dome of the Rock, from the sacred rock visible within the inner enclosure and about which cluster many traditions of different religions.

THE MOSQUE OF OMAR.

octagonal corridor, divided into two naves by an octagonal wall resting upon eight piers and sixteen columns, incloses the interior structure. These outer rows of supports, the columns of which are surmounted by imposts, and which are connected with the piers by architraves, and above these, again, by supporting arches, betray a pronounced Byzantine style.* A gorgeous mosaic decoration, a part of which belongs to the time when the building was erected, adorns the interior.

It was in Egypt that the newfound art first crystallized into a settled and clearly defined system, and showed really imposing results. Here, in the presence of the deep impressiveness and solidity of the works of the Pharaohs, Mohammedan architecture attained a surprising greatness. A massive structure of squared stone, with heavy piers, is the general form of these remains, in which the clear, well-defined form of the pointed arch is seen for the first time. A number of magnificent structures sprang up here, and made Cairo, the new capital of the country, one of the handsomest cities of the empire. Among the mosques which at this early period followed the simple ground-plan of a court surrounded by halls, one of the most important is that of Amru, which was founded immediately after the conquest of the country (in the year 643), and which was considerably enlarged in the succeeding period. About a quadrangular court, the sides of which are nearly 245 feet long, and in the middle of which there is a fountain (see plan, Fig. 270), stretches a corridor, the columns of which are arranged on the front, in a single row, on the left in four, and on the right in three; while in the Hall of Prayer they stand in six rows. They are all taken from ancient buildings and differ in form and height, though the latter is now made uniform by means of pedestals or bases of different sizes. That a greater height may be attained, tall cubical imposts are set upon the capitals; and from them rise the arches of the arcades, horseshoe-shaped, but pointed at the summit (Fig. 274). The stability of the columns is secured by wooden braces stretching from one to the other. Since we find in this case ancient architectural materials employed as we have seen it in the primitive Christian basilicas, we can but consider the Mosque of Ibn-Tulum, of the year 885, a specimen of greater

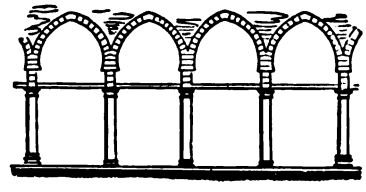


Fig. 274. Arcades of the Mosque Amru.

* See de Vogüé, "Les Eglises de la Terre-Sainte." Fergusson, "History of Architecture in All Countries," ed. 1893, vol. ii., p. 32 ff.

importance; for in the latter we find a complete example of a new and original architectural form in the building of a huge pier structure, with columns gracefully built into the corners of the piers, and richly ornamented arches. The model of the whole building corresponds to that of the one mentioned above, as is shown by Fig. 275, which gives a view of the court surrounded by arcades, of the powerful arches, the rich parapet work on the tops of the walls, the minaret rising in several tiers with its spiral outside stairway, and the solid monumental form of the dome.

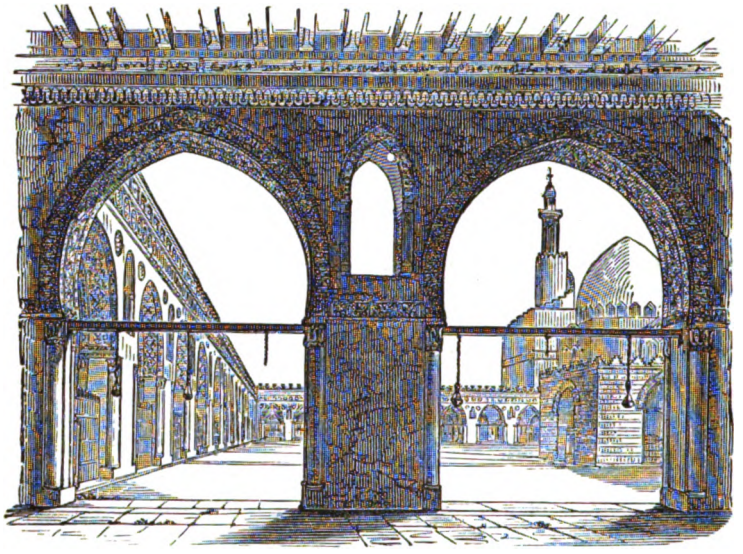


Fig. 275. From the Mosque Ibn-Tulum.

The magnificent mausoleums of the caliphs near Cairo date from the eleventh century, and are stately domes of a simple model resting on square foundations. A delicate parapet borders the quadrangular wall, from which begins, in a series of fantastic forms, the transition to the overarching rounded dome. A lofty portal, richly ornamented with stalactite vaulting, forms the entrance. As works of a later period we may mention the Mosque of Barkauk, of the year 1149, whose arcades are crowned with domes; the exceedingly magnificent Mosque of Hassan, of the fourteenth century; and finally the Mosque El Moyed, of the fifteenth century, in which the spacious halls are supported by columns, and the ceilings and walls are brilliantly decorated.

The Arabs forced their way into Sicily* as early as the year 827, and there founded a civilization which for nearly three centuries steadily continued to increase in splendor. The few remains, however, which have survived the storms of ages, cannot even be traced back to the time of the Arab supremacy, though their character would indicate that they belong to that period. The most important relic of the kind is Zisa, a villa situated in the neighborhood of Palermo. In spite of modern changes it is impossible to mistake the expression of Eastern architectural spirit in the arrangement of the ground-plan (Fig. 276), and in the general character of the whole. Masses of bare, unbroken wall rise to a height of about 88 feet. Pavilions project like balconies from the two shorter sides; while in the middle of the façade, which is 112 feet long, there is a lofty portal bordered by double pillars. It leads to a vestibule somewhat resembling a

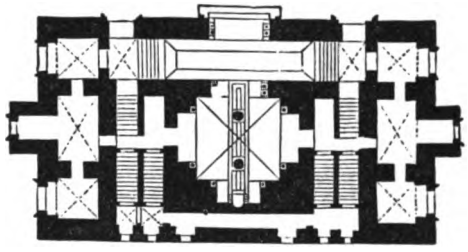


Fig. 276. Ground-Plan of Zisa.

corridor, and from this to a quadrangular saloon provided with niches and a fountain, and having a ceiling vaulted in the form of a cross. Although it has been for the greater part destroyed and afterward restored, this room, with its stalactite vaulting, its mosaic frieze, the rich panelling of the walls, and its marble columns let in at the corners and at the sides of the portal—evidently bearing a close resemblance to the method used in the Mosque of Ibn-Tulum —gives evidence of the former charm of its arrangement, which is heightened in its artistic attractiveness by the soft murmur of the fountain and by the luxuriance of the surrounding country, fair as the garden of Paradise. The Villa Kuba, also situated near Palermo, is a smaller building of a similar kind. According to its Moorish inscription, however, it only dates back to the time of the Normans, and was built by King William II.

* Gally Knight, "Saracenic and Norman Remains in Sicily"; London. Hittorf et Zanth, "Architecture Moderne de la Sicile." Salazaro, "Studi sui Monumenti del' Italia Meridionale."

B.—IN SPAIN.*

Mohammedan art nowhere exhibits so varied splendor as in the Pyrenean peninsula. The conquest of the country took place as early as the beginning of the eighth century; and until the fall of Granada, in the year 1492—a period of over seven hundred years—it remained in uninterrupted possession of the Moors, who founded

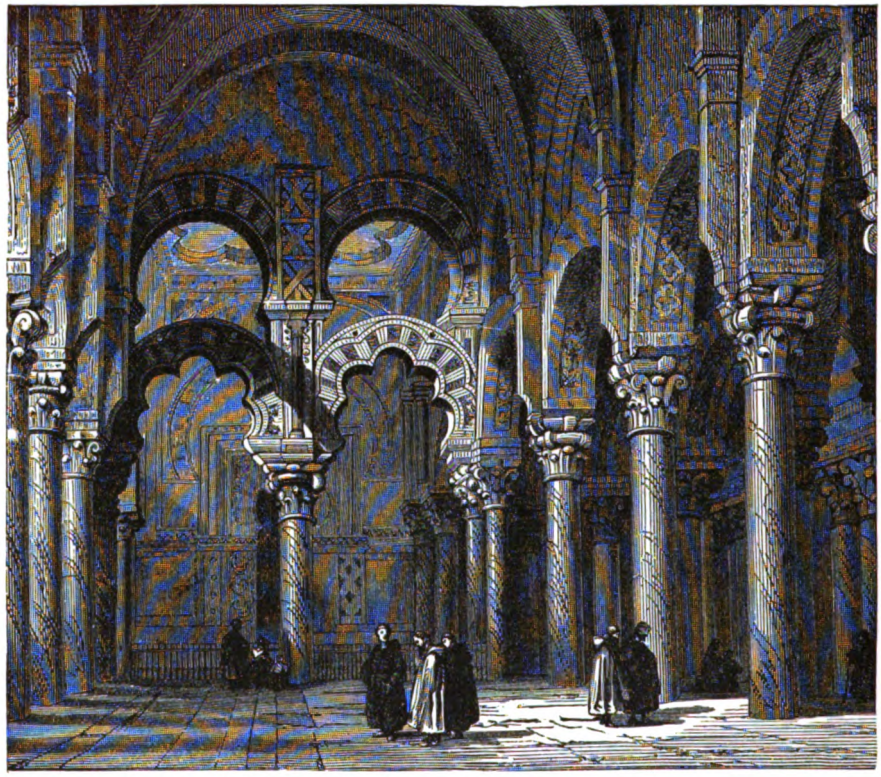


Fig. 277. Mosque at Cordova.

there an independent caliphate under Abderrhaman. The proximity of the Christian Occident, and the constant intercourse, both warlike and peaceful, with the Christian knights, gave a strong infusion of Occidental spirit to Moorish life, and at the same time brought

*G. de Prangey, "Essai sur l'Arch. des Arabes en Espagne, en Sicile," etc. Al. de Laborde, "Voyage Pitt. et Hist. de l'Espagne." Villa-Amil, "España artistica y monumental." Caveda, "Ensayo sobre los diversos Generos de Arquitectura en España"; German trans., ed. by F. Kugler. See also the "Monumentos arquitectónicos di España." Murphy, "Arabian Antiquities of Spain." Jones, Owen, "Plans, Elevations, Sections, and Details of the Alhambra."

Mosque of Cordova in Spain, now the cathedral of the city. It was built by the Moorish conquerors about 800 A.D. *The building is generally forty feet high, with a flat roof which is carried by the long rows of columns and arches seen in the picture. There are seventeen rows running north and south and twenty-six columns in each row, but these are interrupted by heavier piers which replace some columns. Outside of the building there is an open court surrounded in its turn by a fortified wall.*

THE MOSQUE OF CORDOVA.

about a more logical process of development than Moorish art had ever before passed through. A noble, genial, and high-hearted spirit characterized the epoch of Moorish supremacy in Spain, and found its expression in chivalry, in the high cultivation of the country, in science, in poetry, and in art. Architecture shared to the full in these notable advantages.

Soon after the conquest of the country, Abderrhaman, who came to the throne in 786, built in Cordova, the capital city of Moorish Spain, a magnificent mosque, which he resolved should equal the celebrated sanctuaries of Jerusalem and Damascus (Fig. 277). It consisted of a great hall, having a depth of eleven rows of columns, and a central nave somewhat broader than the others. All these

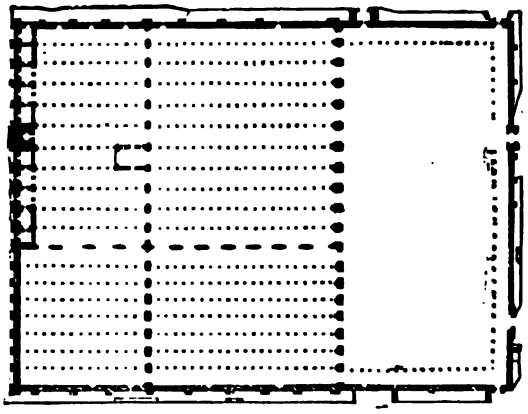


Fig. 278. Ground-Plan of the Mosque at Cordova.

naves opened on an inclosed court which measured about a third of the entire length. In the tenth century, eight more naves were added; so that the whole breadth then comprised nineteen, and the ground-plan of the building measured 560 feet in length by 400 in width. Notwithstanding these vast dimensions, the height of the naves, which are about twenty feet broad, is only about 30 feet; and even this height is only made possible by an exceedingly ingenious and artistic construction. As the antique columns used in the work were only about ten feet long, an ingeniously composed superstructure was added to them. Heavy arches with five-lobed (cinqfoil) inner edge, and having the alternate stones of each arch carved in low relief, spring from the capitals. Between each pair of these arches is a heavy pier adorned with a half-column on either face, and from the classical-looking capitals of these, and from the keystones of the

arches between them, there spring the arches of two other arcades which interlace. This is the system of the central nave; that of the rest of the mosque is simpler but is in like manner piled up with arcade above arcade, so that the short principal columns form only one-third of the height from floor to roof.

The forms of this construction are much more richly developed in the room at the end of the central nave, the so-called chapel Villa Viciosa, which is considerably higher, and crowned by a dome. Here the arches intertwine still more gracefully, and are fantastically formed of a scallop-like series of separate segments of circles, built of white stone and red brick alternating—a design which, in connection with the magnificent ornamentation of the walls, the variegated mosaics, and the rich gilding, produces a most brilliant effect. At the back rises the little octagonal kiblah, the dome of which is peculiarly curved like a shell, and is carved from a single block of

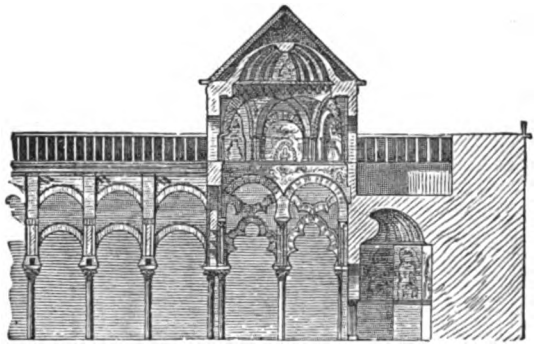


Fig. 279. Section of the Mosque of Cordova.

marble (Fig. 279). These splendidly executed parts belong to a later period of architecture—to the tenth and eleventh centuries. Nevertheless, their details show a decided Byzantine influence; and in like manner the columns of the whole extensive building are copied partly from the antique, and partly from the Byzantine treatment of the antique. Although the mosque was turned into a Christian cathedral after the capture of the city, the changes made were chiefly in the construction, exactly in the middle of the building, of a choir and great chapel in a totally different style. It retains, in all important respects, its original characteristics—a certain severe solemnity and mystic dignity, which receive an enchantingly picturesque and fantastic charm from the wonderfully rich perspective effect of the eight hundred and fifty columns in their double and triple tiers of arches. The outside, on the other hand, is here, as usual, without

ornamentation, cold and bare, only relieved by powerful buttresses, and crowned by a parapet of forked battlements.

The buildings of Seville, where a magnificent mosque was erected toward the end of the twelfth century, the remains of which are still preserved in the northeast part of the cathedral, belong to a second stage of architectural development. The so-called Giralda, the original minaret of the mosque, which, with the exception of a modern bell-chamber, is still in a state of preservation, is a still more important relic than the other portions (Fig. 280). Differing from the slim and graceful and generally round or polygonal shape that is customary in minarets, this building rises up in a heavy, quadrangular mass, and, with a breadth of 43 feet, attains a height of 174, which is increased to 260 by a modern top. The body of the masonry is composed of brick, and is divided into panels by perpendicular and horizontal bands, the surfaces of the panels being exquisitely adorned with rich ornamental patterns worked in bricks. Extending upward from the columned niches, these designs spread like a net over the whole surface, with a constant repetition of the same figure. In the center panels are windows, which are divided by pillars supporting arches of the horseshoe pattern, and bordered by scallops.

Fig. 280. Portion of the Giralda at Seville.

The Moorish style, however, reached its highest state of perfection in the building which shed luster on the brilliant closing epoch of Mohammedan supremacy in the kingdom of Granada. Forced back by the advancing Christian arms to this last southern bulwark, the Moors seem to have once more put forth, in this narrow territory, their whole creative power—the spirit of their civilization seems to have once again burst into brilliant flame before its final extinction. The fortress of the Alhambra,* built on the precipitous rocks overlooking Granada, has towered above the town since about 1250; and the palace which is inclosed by it received its final form in the second half of the succeeding century. After the conquest, a great deal of it was destroyed; and Charles V. removed a large part of the building in order to erect in its place a palace in the renaissance style. That which has been spared, however, suffices to present to the imagination a picture of the most glorious epoch of a poetic and noble chivalry,

* Girault de Prangey, "Souvenirs de Grenade et de l'Alhambra." See also above bibliography of Moorish art in Spain.

and to seem like the realization of an enchanting Oriental fairy tale.

The buildings of the castle are grouped, according to the custom of Southern countries, and especially of the Orient, about two great open courts, whose basin, fountains, corridors, and far-projecting roofs afford coolness and shade. Entering from the side of the old chief entrance, which is now bordered by parts of the palace of King Charles (indicated in our plan, Fig. 281, by more lightly traced lines), one finds himself in the Court of the Alberca, 70 feet broad and 126 feet long, which is bordered on the two shorter sides by corridors. Opposite the entrance on the north side, lies a vestibule, and

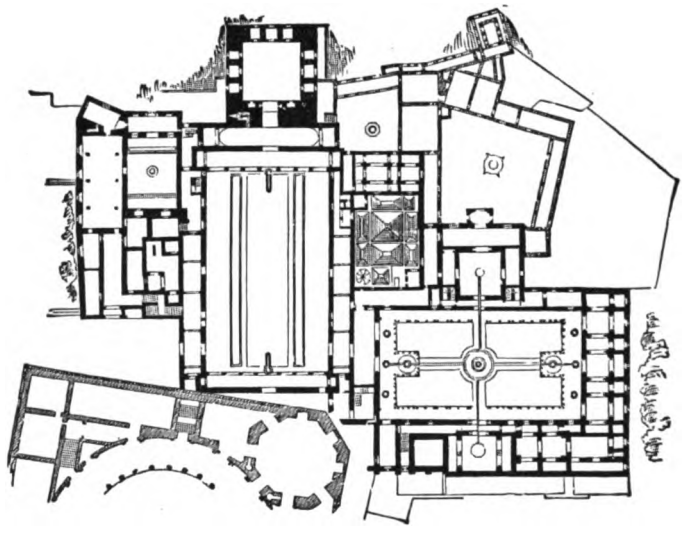
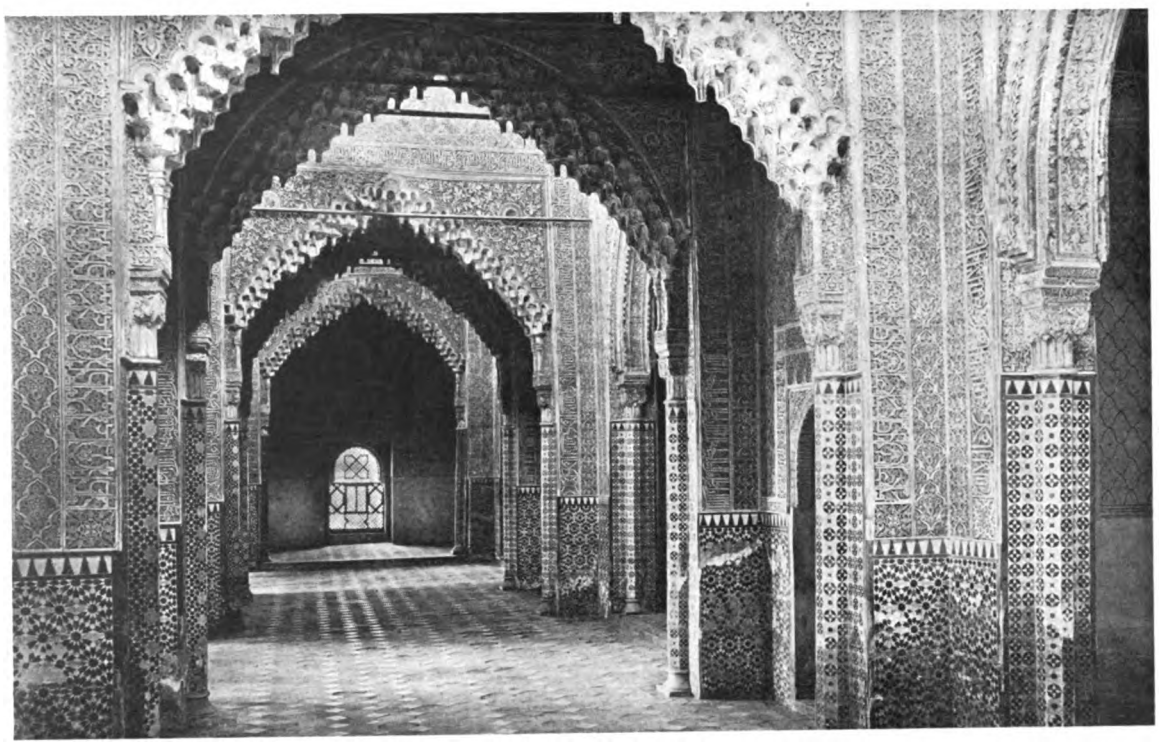


Fig. 281. Ground-Plan of the Alhambra.

behind it, in a massive four-cornered tower, the Hall of the Ambassadors, which forms a square of 34 feet, extended on three sides by deep window-niches in the walls, which are more than 9 feet in thickness. A rich stalactite vaulting forms a dome that rises to a height of 58 feet. These parts were evidently devoted to ceremonial presentations and other public occasions. Very little of that part of the building which borders the Court of the Alberca, on the west side, is still preserved; but the section on the east offers a much more rich and comprehensive picture. The central point in it is a second open court, somewhat smaller than the first; it being 61 feet broad and 108 long, but surpassing the former in richness, finish, and brilliancy of ornamentation. It is also ornamented with fountains, especially one in the center—a huge basin of alabaster, which rests upon twelve

The Alhambra, a fortified palace on a hill near Granada in the south of Spain. It was built during the thirteenth and fourteenth centuries. The rooms given in the picture are what is known as the Hall of the Tribunal, adjoining the Court of the Lions. The decoration is below of enameled tiles, and above of pressed and moulded plaster painted in bright colors with gold.



THE ALHAMBRA.

lions of black marble, and which has given to the place the name of the Court of Lions. Corridors with slim pillars extend around the court, and broaden, in the middle of the two shorter sides, into quadrangular, projecting pavilions that also contain fountains. The columns are here placed in the most varied irregularity—sometimes singly, sometimes in groups of two or even three, as if every severe architectural rule must give way to charming caprice. Proceeding easterly, one arrives in a corridor-like room, with five deep window-niches—the Hall of Justice; while in the middle of the longer sides of the Court of Lions lies, on the north, the hall of the Two Sisters (so called from two great marble tiles in the pavement), and on the south a smaller hall, which takes its name from the assassination within its walls of the family of the Abencerages, murdered at the command of Boabdil. These rooms are the most beautiful and most elegant parts of the castle, and their walls and stalactite domes are covered over with an inexhaustible magnificence of divers-colored ornaments; the Hall of the Abencerages, moreover, being ingeniously connected with two adjoining cabinets by means of graceful arches supported by a slim central pillar. Conduits convey the water of the great fountain in all directions to smaller fountains, which complete the charm of luxurious ease and the dreamy, poetic spirit of the place. A row of bathrooms, which are connected with the living rooms, fills the corner between the Hall of the Two Sisters and the Court of the Alberca.

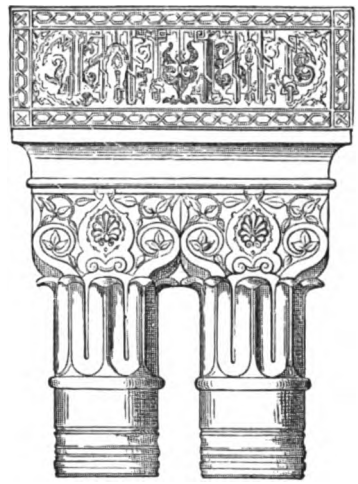


Fig. 282. Coupled Capitals from the Alhambra.

The artistic execution of this ground-plan is everywhere characterized by the greatest delicacy and grace. The seriousness of a fixed system is everywhere lost in an extreme lightness and ease which would surpass the bounds of possibility, but that the material, except of the columns, is of light woodwork covered with stucco, and dependent for its effect on chromatic decoration. It is also small in its parts. Thus the columns of marble shoot up like slender reeds, only connected, as it were, with the foundation by a slight ring; while even the capitals themselves have this same graceful, slight character. A

number of rings encircle the lower part, which is merely a continuation of the shaft; then the form expands on all sides, and forms a cubical top, which is covered with intertwining arabesques, lace-like tracery, leaves, or stalactites. The whole is terminated at the top by a projecting neck under a slab, crowned by a massive impost, the sides of which also exhibit a rich treasure of ornamentation. Where two columns are connected, as in our example (Fig. 282), they have an impost in common. It can be seen at a glance how diametrically this form of column differs from all antique tradition; how it stands out as an original product of the perfection of Moorish style. From the columns rises perpendicularly a massive pier, ending in a frieze that forms a frame, in which the arch appears merely as a necessary complement. It rises with a graceful spring in a round or horseshoe-like shape, its sides and corners so enveloped with open-worked, filagree-

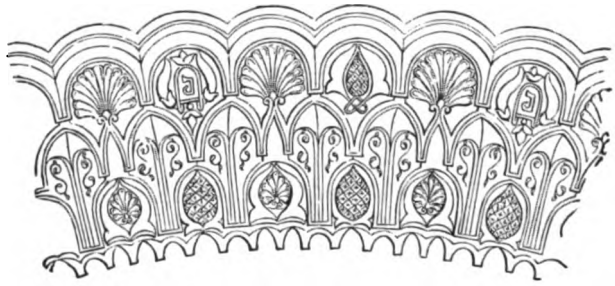


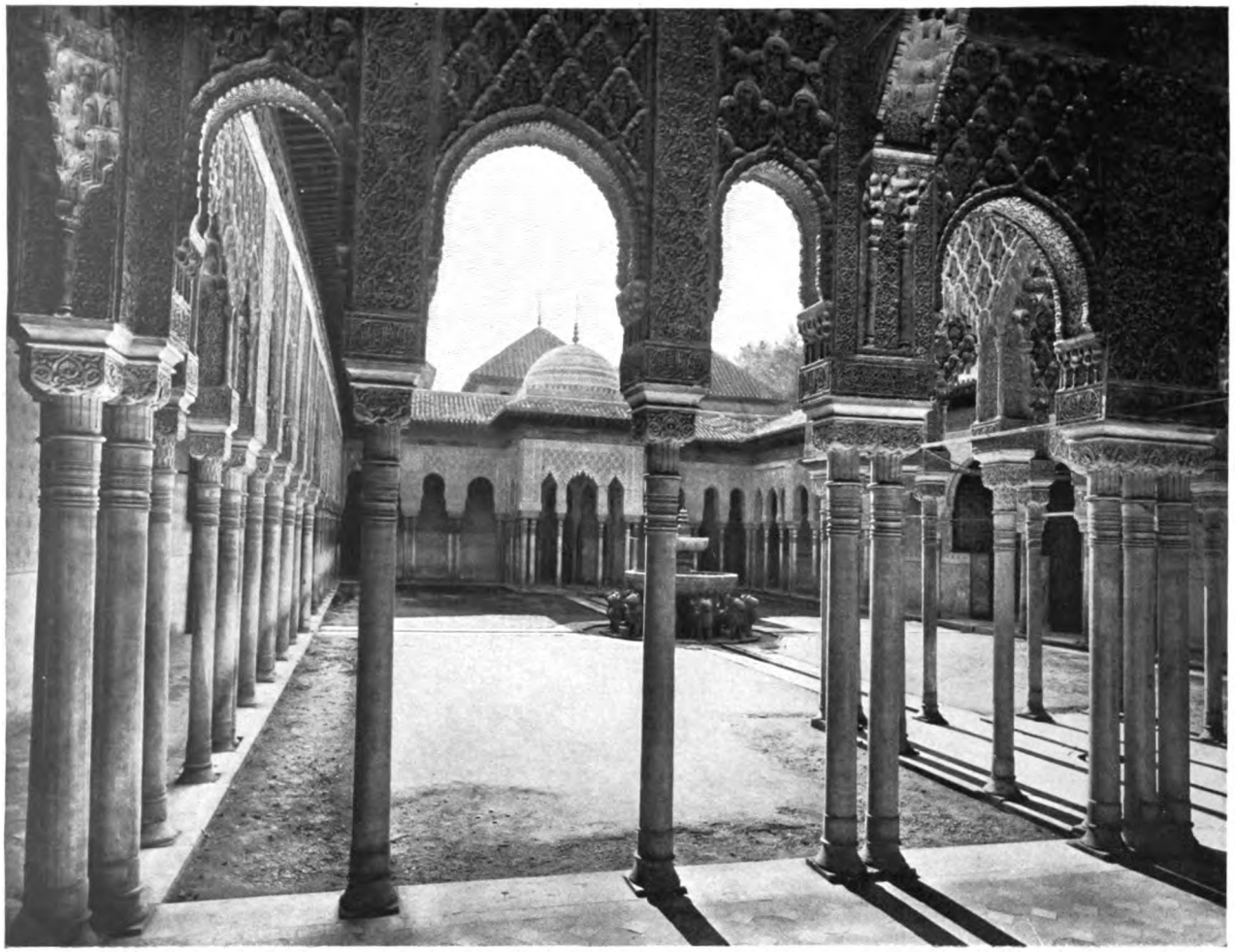
Fig. 283. Border of Arch. (Alhambra.)

like plaster ornaments, intertwining arabesques, scallops, and stalactites, that it appears to the eye like a delicate web, sparkling gorgeously with a wealth of colors (Fig. 283).

To perfect the system of decoration, there is associated with all this rich movement of form an ornamentation of the walls which may be said to stand alone in decorative art. The lower part consists of a dado of glazed tiles, about four feet in height, in simple, subdued colors. The upper surfaces of the walls are separated by broad stripes, having golden inscriptions upon an azure ground, and are marked off into separate panels, whose surfaces blaze with magnificent arabesques in gold, blue, and red.

The Generalife, built upon an opposite cliff, and distinguished for its attractive porticos, fountains, and gardens (Fig. 284), follows a similar model, and has an equally pleasing finish. The technical excellence of these buildings consists largely in the light but admirably worked material of which they are composed. The body of the wall, which rests on columns, is composed of a kind of *pisé*—a mixture of pebbles, earth, and chalk; the vaulting and arches are of

(*See preceding plate*). *The picture shows the Court of the Lions, so called from the fountain supported on twelve carved stone lions of very archaic design. All the decoration of the Alhambra is slight, and composed rather of wood and plaster than of solid material. The decoration is fantastical and rich, but cannot compare with the splendid Mohammedan work at Cairo; still less with that of Persia.*



ALHAMBRA

THE COURT OF LIONS

plaster and stucco laid over a light wooden framework, the ornaments being stamped upon fine plaster.

How liberal Moorish art had grown through close intercourse with the Christian Occident is especially shown in the varied and original artistic decorations of the Alhambra. It is true, the lions of the fountain are clumsy, crude examples of an uncultivated sense of form, these being probably taken from an earlier building. But the paintings on parchments, on the vaulting of the Hall of Justice, ap-

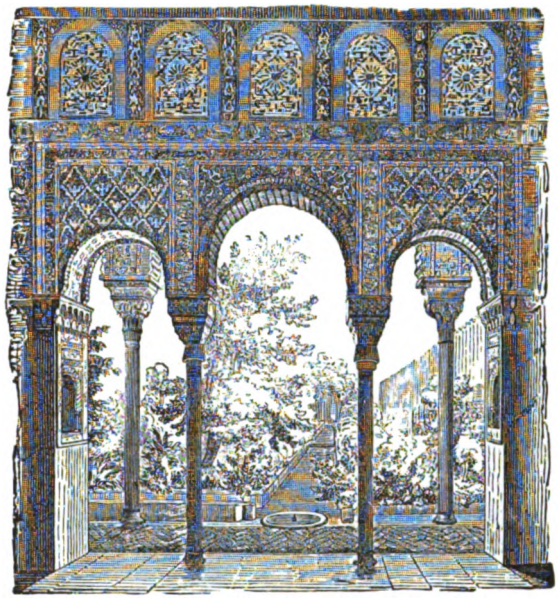


Fig. 284. Portico of the Generalife.

pear to be much more important, being partly representations of Moorish rulers, partly scenes of chivalry that show us the Moors and Christians in various situations; full of *naïve* attractiveness, closely resembling contemporary works of Florentine masters, and probably painted by foreign artists. These, however, appear to be of a late period, not long before the Christian conquest.

C.—IN TURKEY, PERSIA, AND INDIA.*

The Oriental empires were likewise conquered by Mohammedanism at an early period; yet their most gorgeous monuments represent

* See Texier, "L'Asie Mineure;" "Description de l'Arménie." Parvillée, "L'architecture et Décoration Turques."

the last epoch of independent Mohammedan art, and mark the close of a civilization as rich as it was varied.

The edifices that sprang up in Asia Minor under the reign of the Seldschucks, from the latter part of the eleventh to the end of the thirteenth century, indicate a preparatory stage to that which was approaching. They show the influence of Byzantine, and especially of Armenian architectural works, from which they have borrowed the dome and the pointed stone roof. This relationship is also to be seen in the bareness of the walls. They have adopted the ornamental treatment, and even the spreading, wedge-shaped arch, from the Persians; but traces of antique art are also observable—as, for instance, the Victories above the portals of the arches. The pointed arch appears as the most conspicuous form. The interior of these buildings gains a vivid and picturesque charm from its magnificent covering of Persian ceramic tiles, and the outside after the fashion of later Byzantine art, from the use of many-colored stones. The ancient capital Iconium (Konieh) contains important remains of mosques, schools of learning, and so forth. Other remains are to be seen in Cæsarea (Kaisarieh), in Nigdeh, Erzerum, and other places.

The monuments which were called into existence in these regions by the supremacy of the Ottoman Turks after 1326, follow next in the process of development. They were admirably built of squared stone; and the use of variegated material, a marked grace in the division of flat surfaces, and especially a deliberate acceptance of the fundamental idea of Byzantine art, are their architectural characteristics. The fourteenth century saw the most brilliant period of this style, and the reign of Murad I. (1360-89) was its most shining epoch. The green mosque of Nicæa (Isnik), with its tendency toward the Byzantine fundamental form, and the great mosque at Brussa, that goes back to the plan of a vaulted corridor, are to be classed among the most important of these structures.

With the capture of Constantinople, in the year 1453, a turning-point occurred in architectural development.* The magnificent Church of S. Sophia was turned into a mosque, offering in its gigantic domed structure a model for other architectural works to which Oriental architecture surrendered itself the more readily because even before this, the dome was a familiar form in the Orient, and because Byzantinism had, even in the earlier epochs of Arab art, acquired a great influence over the Mohammedan mosques. An imposing central structure, covered by a dome, becomes henceforth the model of these buildings in Turkey; the slight, slender, needle-like,

* Ali-Bey (pseud.), "Voyages en Afrique et en Asie." J. von Hammer-Purgstall, "Constantinopolis und der Bosporus." F. Adler, in the "Deutche Bauzeitung."

and pointed form of the numerous minarets forming a striking contrast to the heavy mass. The most imposing of the imperial mosques —that is to say, of the houses of worship founded by the sultans (Djami-i-Salatin), nearly twenty of which are to be counted in Constantinople alone—express this governing thought in two principal types. The first is to be found in an arrangement of the central domes, to which two half-domes are added on the longer diameter of the building, this being the great type of S. Sophia; the second, which still more sharply defines the fundamental motive, consists of a principal dome, inclosed by four smaller ones in such a manner as to form a cross. This last form makes its first appearance in the Mosque of Mahmud II., which was built by a Byzantine architect in 1463-69. Both forms prevail by turns in Turkish architecture. Thus the form of the Church of S. Sophia was used in the Mosque of Mahmud Bajasid II. (1497-1505) and in that of Solimanieh (of which we shall make further mention); while the shape of the Mahmudieh appears again in the Mosque of the Princess, the work of Sinan, between 1543 and 1548, as well as in the great Mosque of Achmet I. (1609-14). All the brilliancy of the ornament is generally concentrated in the mosaic decoration of the interior, while the exterior is as a rule, neglected. The powerful arches of the domes, and the slender minarets—of which there are generally four, one rising from each corner (only the Mosque of Achmedieh has six)—make up a characteristic exterior. Among the brilliant works of this kind the chief are the Mosque of Selim II. at Adrianople (1566-74), a dome resting on eight colossal polygonal pillars; and especially the magnificent Mosque of Soliman II. at Constantinople. This is an imitation of the Church of S. Sophia, with pointed arches. Near it rises the mausoleum of the Sultan, an octagonal dome, simply executed, with groups of pointed windows, and surrounded by corridors with pointed arches. These three works were executed by Sinan, the most celebrated of the Turkish architects.

Under the supremacy of the Mohammedan faith, to which it had been subject since the days of Osman, Persia* experienced a long epoch of high moral and material civilization. The only important monuments, however, that have been preserved, belong to a later epoch—to the time of the conquest of the country by Timur, toward the end of the fourteenth century. They give evidence of a splendid development of Oriental art. Ottoman architecture acquired a decided influence over the Persian from the time of the conquest of Constantinople, when it found in the Church of S. Sophia a model

* Texier, "Description de l'Arménie," etc. Cose et Flandin, "Voyage en Perse." Sarre, "Denkmäler Persischer Baukunst."

which led to a most important progress in mosque-building. Thus Byzantium, even in its downfall, exercised a beneficial influence upon the Orient as well as upon the Occident. The Persian mosques also adopted the dome resting on a polygonal or square foundation, and succeeded in producing a splendid effect by means of it. The main characteristics of Persian buildings are high portals and rich minarets, a pleasing realism in their ornamentation, which introduced figures of flowers and plants, and finally the use of soft, cheerful tints.

One of the most finished of these works—now lying in ruins—was the mosque at Tabriz, erected in the middle of the fifteenth cen-

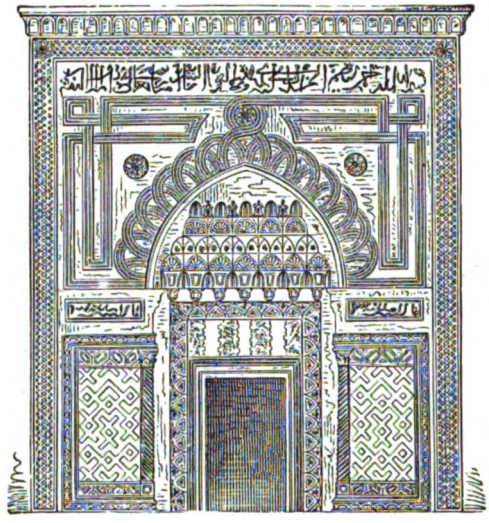


Fig. 285. Portal of the Mosque of Ispahan.

tury (Fig. 271). It consists of a domed nave about fifty feet in diameter, surrounded by vaulted aisles, whose decoration combines most costly magnificence and harmonious beauty. Flowers and plants in vivid green and white intertwine on an azure ground; golden inscriptions of Arabic letters, on a black ground, are interwoven with them. As a whole, the Persian patterns have rather a realistic character, while those of the Spanish Moors have rather a formal architectural style. The ornamental buildings which sprang up at Ispahan, the capital city of the Sufi dynasty during the sixteenth century, are also remarkably gorgeous. The most noteworthy ones are grouped around a gigantic square, the great Maidan, which is surrounded by a two-storied, vaulted arcade with pointed arches, and which has in the middle of each side a very high gateway flanked by

minarets. One of these portals leads to the great mosque (Fig. 285), which, as well as the whole structure, is a work of Shah Abbas the Great (1587-1629). Deep outer courts and a succession of ornamental doors with minarets prepare the way for the effect of the interior, the chief apartment of which is surmounted by a dome, that exhibits, with its convex and striped profile, the fantastic character of the Orient. All these forms are concealed on the outside and inside with a network of the most exquisite ornamentation; and even the

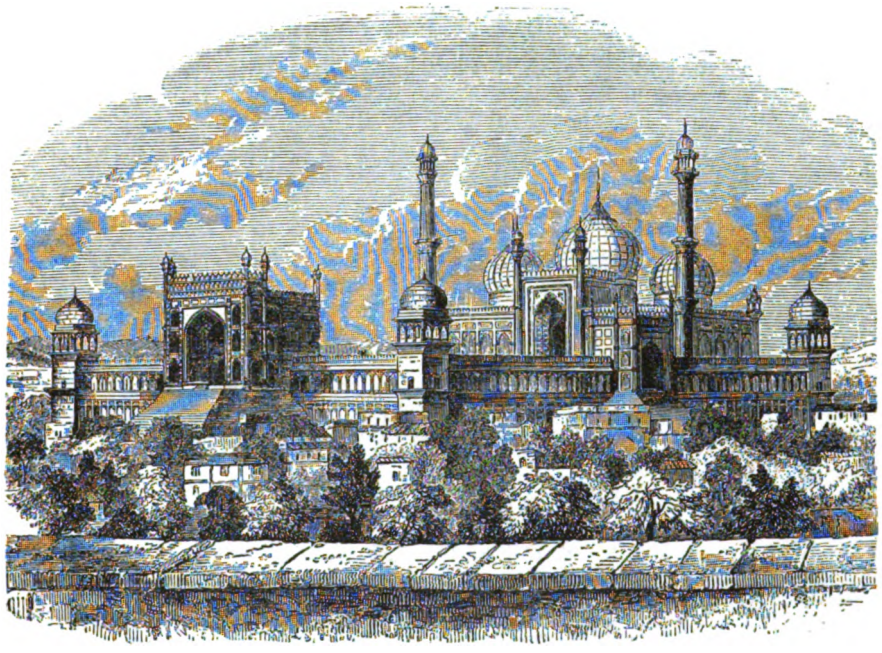


Fig. 286. Great Mosque (Jumma Kusjid), Delhi.

mighty dome is completely covered with variegated tiles; so that the solid part of the architecture is lost in a maze of decoration. The tapering form of the pointed arch prevails in the dome as in the portals, which include a semicircular niche richly ornamented, and covered with cell-like vaultings.

A number of equally beautiful works have been preserved in India, that belong, also, to the closing epoch of the Mohammedan style. The reign of the Great Moguls, who took their origin from the dynasty of Timur in 1526, was greatly distinguished for its magnificent monuments, the most admirable of which came into existence in the time of Shah Jehan the Great and his grandson; that is to say,

in the sixteenth and seventeenth centuries. Just as the new court imitated that of the Persian Shah in language and customs, so, too, its art was formed according to the leading features of the Persian; hence we have the same principal forms—the striped arches and domes, the high niches, the frequent grouping of slender minarets, the extensive courts and halls. But instead of the delicate style of the Persian ornamentation, the exterior assumes the character of imposing and massive proportions, the different parts of which offer very picturesque contrasts, it is true, though, in the weight and gravity of their monumental expressions, they seem to be striving to imitate the ancient Hindu works of the country. A fairy-like splendor of costly stuffs, precious metals, and jewels, that realizes the dreamy charm of

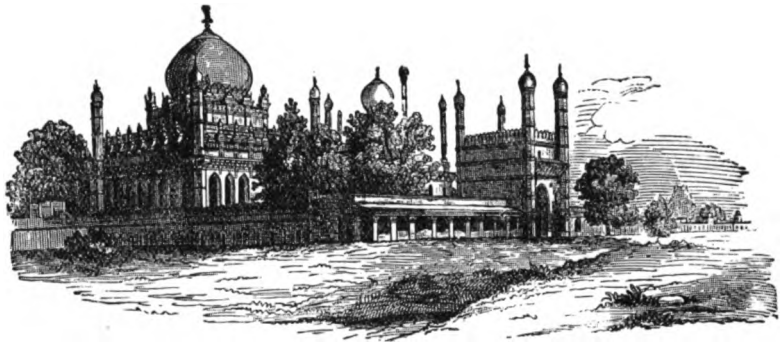
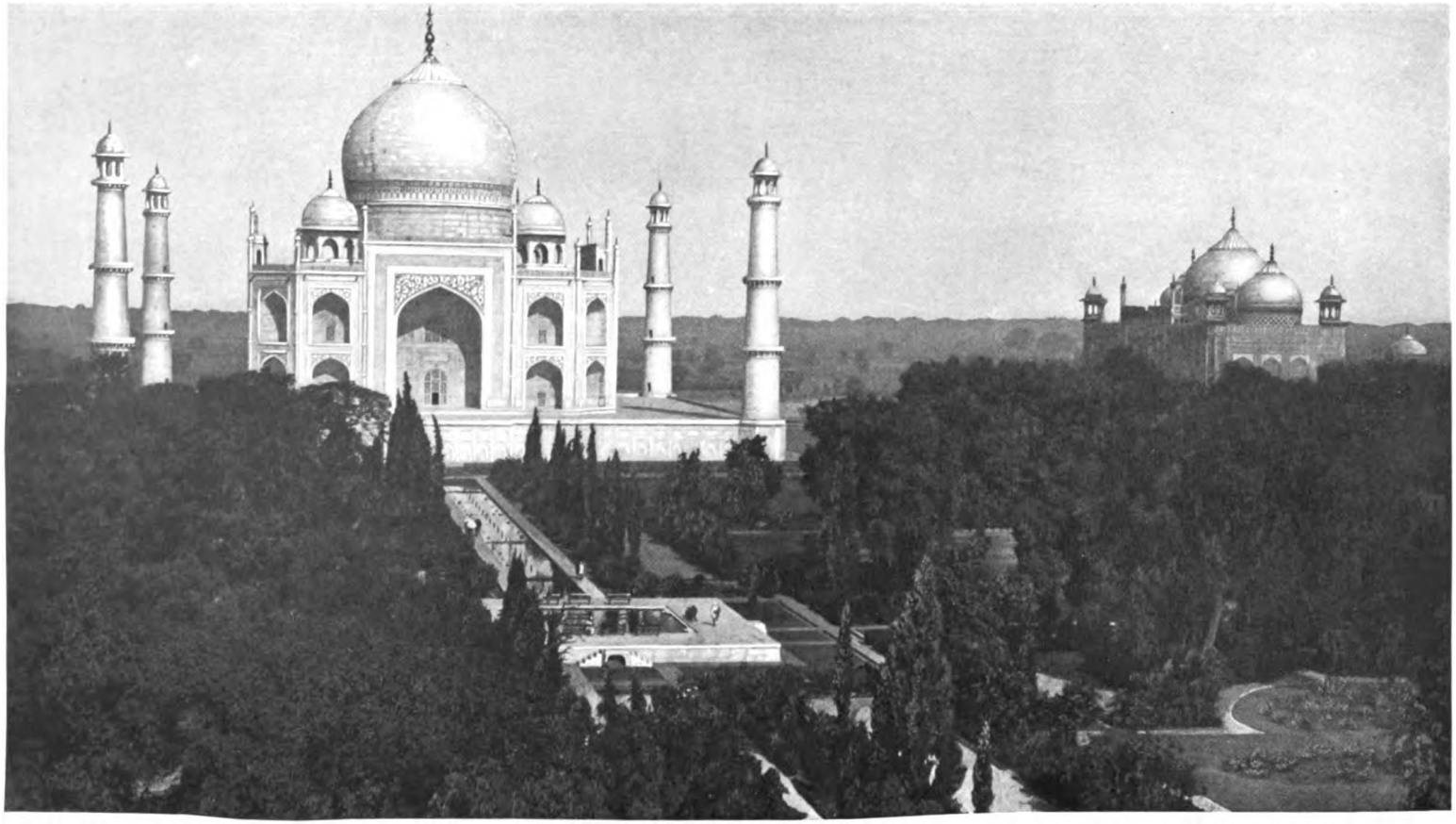


Fig. 287. Mausoleum at Bedjapur.

an Oriental fairy-tale, is lavished upon the inner decoration. Shah Akbar built his father's mausoleum near Delhi, and his own at Sacundra (Secundra), near Agra; and at Agra the Jumma and the Pearl Mosque, Moti Musjid—works whose wealth is surpassed by the still more magnificent enterprises of Shah Jehan. He founded New Delhi, and adorned the city with ornamental buildings, especially with his own imposing palace and the brilliant Jumma Mosque (Fig. 286). He built a mausoleum for his favorite wife, Nur Jehan, near Agra—the celebrated Taj Mahal, a pavilion of white marble, which, surrounded by beautiful gardens, rises from imposing corridors. Open-work marble screens soften the sunlight that streams into the dome, 70 feet in diameter, and lights up the fabulous splendor of its glittering, colored, flower-patterned mosaics. Farther south, in the Deccan, numerous monuments of the same late period are to be found, above all others the masoleums, palaces, and mosques at Bedjapur (Fig. 287), whose composition is more picturesque, richer, and more in the old Hindu manner.

The Taj Mahal near Agra in northern India. It is a mausoleum erected by the Emperor Shah Jahan, about A.D. 1630, *in memory of his wife. The building is of white marble, and in the decoration of the screens, doorways, etc., a great amount of extremely delicate mosaic is used, so that the building is unique in the richness of its adornment. The building at the right of the picture is the gate-house known as the Siri Gate.*



THE TAJ MAHAL

4. *Appendix.—Christian Art in the Orient.*

A.—ARMENIA AND GEORGIA.*

About the period of the tenth and eleventh centuries, there sprang up in the regions of the Caucasus a type of Christian architecture which took its fundamental laws from the system of Byzantium, but which, in its methods of applying them, showed distinctly the influence of early Mohammedan art. The ground plan of the churches erected under this system followed the form of the Greek cross, with a dome rising from the center, and though this clearly shows a Byzan-

Fig. 288. Cathedral at Ani.

tine model, the form of the dome itself displays an entirely original conception. Instead of the rounded vaulting, showing its shape even in the exterior, we find here a tent-like roof of stone covering the dome—a method probably first suggested by the nature of the climate in these mountainous regions. The interior is divided into different parts, generally by massive pillars made up of clusters of slender

* Texier, "Description de l'Arménie," etc. Dubois de Montpéroux, "Voyage autour du Caucase." D. Grimm, "Monuments d'Architecture Byzantine en Géorgie et en Arménie." Cole, "Illustrations of Buildings Near Agra and Muttra." Le Bon, G., "Les Monuments de l'Inde."

columns; and in the roofing, domes and cylindrical vaultings are employed. The chief apse, at the altar, is generally accompanied by two smaller apsides, for the side aisles. The outside of the walls is divided by a series of delicate and slender semi-columns, connected by blind arcades, and they are further adorned by singularly rich sculptured architraves and archivolts which inclose the narrow arched windows. These are employed both on the main wall and on the drum of the dome. Besides these, the cornices are decorated with flat friezes of scroll-work and interlacings, which, however, like all the

Fig. 289. Church of Wasili Blagennoi. (Moscow.)

ornamental adjuncts, have a certain forced look and lack of strength, and give an unsatisfactory and feeble air to these superficially conceived, but, on the whole, well-proportioned buildings.

Examples of this kind of architecture may be found in the Cathedral at Ani (Fig. 288)—which is, however, of but small dimensions, like the other churches of the country—and in the Cloister Church of Etschmiazin, and the Church of St. Rhipsime at Vagharschabad—the last built on a most complicated variation of the cruciform ground-plan. The Church at Ala Werdi and that of the Holy Virgin at Gelathi in Georgia are other specimens.

B.—RUSSIA.*

Russia received Christianity, and with it the Byzantine system of art, as early as the tenth century; but here it was more intimately associated than elsewhere in Europe with the forms of Oriental taste. The ground-plan of the churches follows Byzantine rules; and domes and cylindrical vaulting are used in the roofs, overloaded with ornamentation in painting and costly variegated stones. In spite of these, the effect of the interiors is generally dark; but the exteriors show such an extravagant abundance of fantastic forms, and are so covered with towers, domes, and domed turrets, glittering with striking colors and gilding, that the eye loses itself in the fairy-like confusion. The work which is considered the best example of this style is the Church of Wasili Blagennoi at Moscow, from the low body of which spring a swarm of domes and towers, "like a stool of glittering mushrooms" (Fig. 289).

Religious pictures which copy the old Byzantine models in a spiritless, unvarying way are used in the Russian Church even at the present time. These crudely painted and monotonous works may be frequently seen in museums. There is an especially good collection in the Imperial Gallery in Berlin.

* Rikliter, Fedor, "Pamyatniki drevnyavo russkavo zodchestva" (translated into English as "Monuments of Ancient Russian Architecture"). Demidoff, A. N., "Voyage Pittoresque et Archéologique en Russie." Souslow, W., "Monuments de l'ancienne Architecture Russe." Martinow, Alexis, "Anciens Monuments des Environs de Moscou." Kipranov, V., "Histoire Pittoresque de l'Architecture en Russie."

Chapter III.

THE ROMANESQUE STYLE.*

1. *Character of the Romanesque Epoch.*

RISING from that great wave of barbaric invasion which swept away the crumbling fabric of Roman rule, the Frankish Empire, as soon as the flood had ebbed, sprang into immediate leadership, and won, under Charlemagne, the position of a new, world-dominating power, like a revived empire of the Cæsars. In it the last remains of ancient civilization were collected, and preserved as the germs of further development. The barbaric population of the West learned to subject itself to political laws, and adapt itself to old forms of culture. But at the first it could not rise to the power of producing really new creations and a thoroughly fresh life, simply because it was impossible for the rough strength of the Northern races to be completely and at once amalgamated with the already indistinct forms of old tradition. It was only the fall of the Carlovingian Empire, therefore, that really founded the new epoch. The Germanic mind rebelled against that united realm which had been established on the old Roman model; and it was only with the dissolution of Charlemagne's Empire in 843 that the period of development began, which is properly, and in the ac-

* Adamy, R., "Architektonik des Muhamedanischen und Romanischen Stils" (forms a part of "Architektonik auf Historischer und Aesthetischer Grundlage"). Adler, F., "Mittelalterliche Backstein-Bauwerke des Preussischen Staates." Choisy, A., "Histoire de l'Architecture." Dartein, F. de, "Etude sur l'architecture Lombarde." Révoil, H., "Architecture Romane du midi de la France." Ruprich-Robert, V., "L'Architecture Normande, au XIe et XIIe siècles." Puttrich, L., "Denkmale der Baukunst des Mittelalters in Sachsen." Kugler, F., and Ranke, C. F., "Die Schlosskirche zu Quedlinburg." Schiller, C., "Die mittelalterliche Architektur Braunschweigs." Taylor, Baron, "Voyage pittoresque et archéologique dans l'ancienne France." Laborde, A. de, "Monuments de la France." Du Sommerard, "Les Arts du Moyen Age." Viollet-le-Duc," Dictionnaire raisonné de l'Architecture française." Britton, "Cathedral Antiquities of Great Britain;" "Architectural Antiquities." Minutoli, A. v., "Der Dom zu Drontheim." Dahl, "Denkmale einer ausgebildeten Holzbaukunst." Agincourt, S. d', "Histoire de l'Art." Knight, H. G., "Ecclesiastical Architecture of Italy." Chapuy, "Italie monumentale et pittoresque." Burckhardt, J., "Der Cicerone" (translated into English by Mrs. A. H. Clough). Street, G. E., "Brick and Marble in the Middle Ages." Schulz, H. W., "Denkmäler der kunst des Mittelalten in Unter-Italien." Krutz, "La Basilica di S. Marco in Venezia." Mothes, O., "Geschichte der Baukunst und Bildhauerei Venedigs."

General view of the Kremlin at Moscow. The Kremlin is, as it were, a separate city within the larger town of Moscow. It has its own fortified walls and gateways, and indeed its most attractive buildings are the towers of the fortifications. There are within the Kremlin some remarkable Byzantine churches and the very ancient palace of the Tzar.

MOSCOW
THE KREMLIN

curate sense of the word, called mediæval. This growth was preceded, to be sure, by a time of wild disorder; and everything seemed about to sink back into chaos. But the firm rule of the Saxon emperors founded a new condition of order, which soon reacted on the rest of Western Europe. The last five decades of the ninth century may be looked upon as the true beginning of the middle ages. The first epoch, which from the point of view of art is called the Romanesque, extends to about the middle of the twelfth century, though its art lingered on, in Germany and in parts of Italy, even into the great thirteenth century, in despite of the Gothic movement.

The character of this period is diametrically opposed to that of all previous stages of development. While in the ancient world the different peoples developed independently side by side, one succeeding another, and each worked out for itself its own form of civilization, prescribed by its mental endowments and its natural surroundings, by the character of the region, the influences of the climate, and then, at length, all peculiarities were alike crushed out by the Roman supremacy of the world; so, now, all nations united in a relation of mutual and equal activity in the development of civilization. Christendom gave the same direction to all, the same goal, and the same foundation. Its rule did not, however, fetter the individual, but, on the contrary, secured to him a free exercise of his ability and will. Thus great fundamental laws arose, everywhere equally applicable, which, nevertheless, in no sense did away with the rich variety of individual national peculiarities. Thus, in this epoch, the modern nationalities developed freely and vigorously in language, morals and art.

Now that the still young and vigorous nations of Germanic blood, or controlled by Germanic invaders, under the guidance of Christianity, with one accord strove to possess themselves of the remains of ancient culture, and to mold themselves in conformity with the requirements of Christian law and the forms of Roman antiquity, the result was a new form of social life. The Church was, at that period, the sole depository of learning; and, with Christianity, she spread abroad morality and the spiritual life by means of her monastic establishments. These, in a period of wild commotion and keen strife, were the asylums of high culture; and it was from them that all the arts and sciences were gradually diffused. But at the same time, from the military spirit of the Northern nations came the institution of chivalry—a system consecrated by the Church, and whose asperities were moderated by a tender regard for woman. These elements impressed upon the Romanic epoch a mingled hierarchic and aristocratic character. It was only gradually that, under the protection of the abbeys and the episcopal sees, the settlements of the common people

developed a burgher class, based on worth, diligence, and industry. It flourished only in the succeeding epoch.

Out of groups so diverse as these was formed the state, not in the sternly despotic form of Roman domination, neither in the republican spirit of Greece, but as a feudal union, based on ancient German tradition as modified by the institutions and the needs of more recent times. It was founded on personal relations, imposed little restraint on the activity of the individual, and gave to the epoch its peculiarly mobile character. It was a period of effort and development, of action and reaction of forces, of rugged valor and fanatical tenderness, of cruelty and gentleness—a chaos of rude contrasts. And if this condition of things was the natural result of the Germanic spirit, of a period of transition and youthful fermentation, the teachings of Christianity were calculated only to intensify the strife. Christianity disturbed the harmony between man and nature, and introduced a sense of discordance by proclaiming to man a higher spiritual law, in the light of which his inborn nature became a sinful thing which he was to overcome. The result was an unrest, a feeling of discontent, and, as a consequence, a balancing between fierce passion and deep remorse, but, at the same time, intense devotion and lofty contemplation.

We can notice these traits only in so far as they help us to understand artistic growth, and explain the restless pulsations which traverse the whole civilization of mediæval times, and impel the artistic activity of the age to unceasing struggle and to fresh development. This is especially true of architecture, which, throughout the Middle Ages, took the lead in all the higher forms of activity. It was natural that art should attain exceptional eminence in a period which strove to express in bold characters the thoughts which filled all minds, while yet literature was in its infancy, books were inaccessible, and few could read even the words of a prayer or a song—a period when the masses and the corporations had weight, and when the individual was held fast within the insuperable limits of his station, of his association. A freer development of the fine arts met with too many hindrances; there was, first of all, the fluctuating, unsettled, agitated state of men's lives and fortunes, and therefore of their minds; then the attitude of opposition to nature assumed by Christianity, and the inflexible church tradition, which kept artistic occupations already shut up between monastic walls in spiritual bondage and a narrow life, and required the artist to confine himself to simple copying of the ancient types. Hence the fine arts were dependent entirely on church building, and from it received their laws. They were required to be strictly subordinate to the total effect, to fit themselves into the

frame appointed for them by the architect, and to have regard for symmetry and rhythm; and thus they were restrained in their freedom of action. Nevertheless, even under these hard conditions, the fine arts learned to take steps for themselves; for it is a universal law of development, that at the proper time, and when there is a sufficiency of native force, the fetters which confine the young life are burst asunder.

2. *Romanesque Architecture.*

A.—ITS SYSTEM.

The old Christian basilica is the starting-point for mediæval architecture. It was universally held to be the chief canonical form of a church edifice; the round form having never received much favor north of the Alps after the early time when the churches at Aix-la-Chapelle, Cologne, Bonn, and the different imitations of the Holy Sepulcher Church at Jerusalem were built; but, during the five hundred years of its development, the plan with nave, aisles, and transepts underwent a series of remarkable transformations, till, at length, what was at first plain and even rude was changed into one of the highest forms, one of the most perfect creations, of architecture. What distinguishes the Romanesque basilica from that of the early Christian period is the entirely novel form displayed in the architectonic basis of the structure. But even the ground-plan itself could not be retained without considerable modifications. These especially affected the choir and the façade —the eastern and western portions of the edifice. The body of the building usually is, as in the ancient Christian basilicas, a wide, middle nave, between two side aisles of only about half its height and width. The five-aisled plan is in this period still rarer than in the preceding one. At the end of the nave a boldly projecting transept usually separates the former from the choir, thus giving to the church its cruciform shape (Figs. 290, 291). Often, it is true, the transept (as in Fig. 292) does not project; and in that case it is indicated on the plan by the greater distance be-

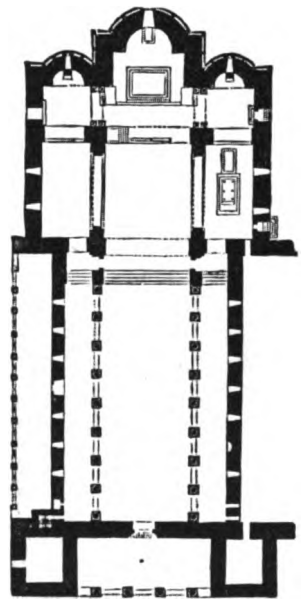


Fig. 290. Church at Monreale.

tween the piers; and appears in the structure by means of its greater height. Sometimes it is altogether omitted. The most considerable modification of the choir consists in extending the middle nave to a distance of about one-fourth of its length beyond the transept, when it terminates in the apsis. This enlargement of the choir space was made necessary by the great number of the monastic clergy who had to be seated along the two side walls. Owing to this change of the ground-plan, the intersection of the nave and transept became what it remained throughout the Middle Ages, and in all "cruciform" aisled churches to the present day; a space open on all sides, and defined by four massive piers, one at each angle (Figs. 290, 291, 292), carrying four arches. This open space, called in modern times simply "the crossing," was often carried up into a tower, the walls of which were carried by the four great arches described above. Its floor was sometimes made continuous with the choir, and was cut off from the main nave and the arms of the cross by a stone screen, often called jubé, or simply choir screen. As the choir and transept grew more important and extensive this jubé was often set under the arch between the choir proper and the crossing; and this was the usual disposition in the thirteenth century and later. The side of the screen toward the nave was often provided with a sort of tribune, from which the gospel used to be read to the people; hence it got the name of "lectorium" from the Latin term for the reading-desk—the lectern. Commonly the whole of the choir, or presbyterium as it was also called, stood several steps higher than the nave; and under it was a subterranean church, the crypt, with arches supported on short, isolated columns. It served as a burial-place for eminent persons, such as the abbots, or the founders of the church; and it had an altar of its own. In this case, then, the choir space, as being the holy of holies, stood high above the level of the nave, in which the congregation assembled.

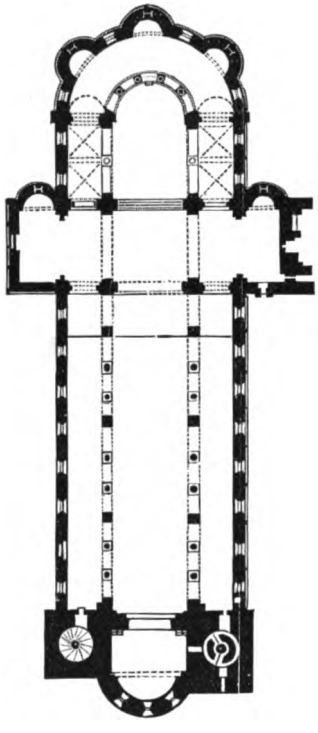


Fig. 291. S. Godehard at Hildesheim.

In this enlargement of the choir there is developed a great variety, ranging from the simplest plan—which sometimes rejects even the apse, and terminates the choir with a square end—up to the highest degree of complexity, in which, by the free employment of apses, very lively and picturesque effects are produced. Not only may the arms of the cross, that is, the north and south transept and the choir, have their special apses, but the side naves sometimes project alongside of the choir, and also terminate in apses (Fig. 292); or a ring of apses may surround the middle space as a semicircular aisle (Fig. 291), and contain a number of recesses, which give to the plan of the high choir an arrangement as though its parts radiated from a common center. As all these apses served as niches for altars, the greater or less requirements of the worship became the occasion for a corresponding modification of the ground-plan. But these conditions were different in different religious orders; and, even in the different convents of the same order, they differed widely, according to the number of monks, the funds provided by pious founders, and other similar circumstances.

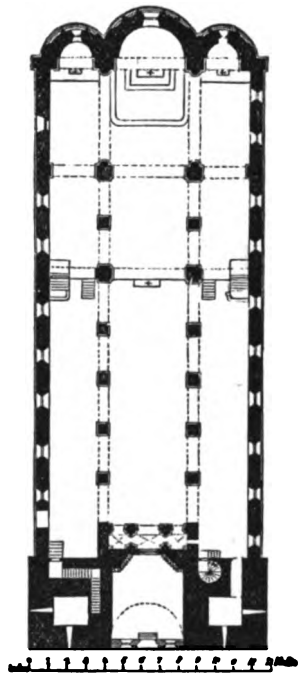


Fig. 292. Cathedral at Gurk.

Another result of the change in the forms of worship was the suppression of the narthex, and of the open atrium of the basilicas. The whole congregation of the laity, no longer graded as in the early days of Christianity, must have free admission to the house of God; and hence, at most, therewas left only a small porch before the main portal; and the cantharus, or tank, which before had stood in the atrium, was contracted to the proportions of the holy-water basin at the entrance of the church. The main portal is usually in the middle of the western end wall; so that, as one enters, the first thing that meets his eye is the elevated choir, with its apse in the distance. Often, however, in bishops' churches (cathedrals) and in great abbeys, a second choir was necessary; this stood at the western end of the church, and faced the main choir, as shown in the Church of St. Godehard in Hildesheim (Fig. 291); and this westerly choir was sometimes even developed so as to have a second transept. But wherever the more ordinary arrangement pre-

vails, the main portal, which grew to be synonymous with the west end, is flanked by two towers, one on each side; and in Northern art these are connected directly with the church-building, thus adding to the artistic development of the basilica a new and important element.

These important modifications of the ground-plan were emphasized in various ways, by new forms, in the development of the architectonic structure. True, the low-pitched roof was still retained for a long time over all the portions, except the crypt and the apses; nevertheless, certain essential parts of the structure acquired a new arrangement, and, first of all, the supports on which the arches of the arcades rested, sustaining the upper wall of the middle aisle. Often, it is true, columns are here employed, as in the ancient Christian basilica (Fig. 290), but this was generally where antique shafts could be got. More frequently, isolated piers built of small stones are introduced into the row of columns, either alternating with the latter, or supplanting every third pair of columns (Fig. 291), as in the two Hildesheim churches already mentioned. But this innovation hardly existed except with the vaulted roof, for which see the next paragraph. Finally the piers come to be exclusively employed in a few instances (Fig. 292). Then an effort was made to enliven the lofty upper wall of the nave by placing a cornice over the arcades, from which vertical bands sometimes extend downward to the capitals of the pillars; or by spanning each two arches of the arcade with a larger arch, skipping one pillar (Fig. 293). The windows of the clear story are then placed above the cornice of the arcade. They are smaller than in the ancient Christian basilica, but splayed both within and without, to give freer entry to the light; and, as in the ancient basilica, they terminate above with semicircular arches. Similar windows, only smaller, are cut in the exterior walls of the side naves, as also in the apses; in the principal apse three, and in the minor apses only one each.

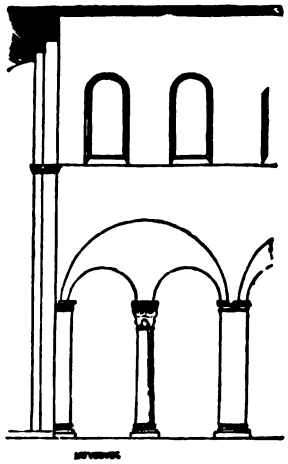


Fig. 293. Church at Huysburg.

But the Romanesque style did not long retain this simplicity of construction. The frequent fires which seized on the rafters of the roof, destroying them, together with the wooden ceiling, and ruining pillar, column, and wall, now gave rise to an innovation, which at the same time gratified the higher æsthetic sense. The question was, how to

combine vaulting with the plan of the basilica. In some places, cylindrical vaulting was tried, and this did fairly well for the aisles, which were low and narrow, while hardly succeeding with the high nave; and even a series of cupolas covering square compartments by means of pendentives (see Byzantine Architecture), as was frequent in middle France. But the influence of these essays was merely local, and not calculated to call forth any general imitation. A better and more promising solution of the problem was the adoption of the cross-vault, already employed in contracted spaces, and the employment of which in the broad and lofty nave of a church was simply a bold innovation made possible by the now enlarged technical skill of the artisan. At first, the architect was content with roofing the side naves with separate cross-vaulting—a thing all the easier, as their breadth was about equal to the distance between the piers; thus giving square spaces. Transverse arches were then thrown across from the piers to pilasters projecting from the outer wall, and the square spaces thus formed were roofed with cross-vaulting. And now, as there was a firmer substructure, galleries were sometimes erected over the side naves, presenting toward the principal nave an arrangement of columns, and breaking the wall-surface over the arcades (compare Fig. 294). This mode of enlivening otherwise bald surfaces was of such service in giving freer articulation to the superstructure, that it was oftentimes employed even where there were no galleries at all, and where it merely simulated the so-called *triforium*.

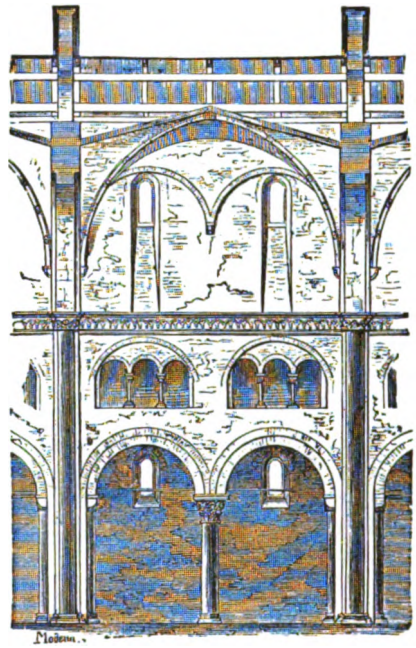


Fig. 294. From the Cathedral at Modena.

But now, inasmuch as similar square spaces were required in vaulting over the middle nave, one pier was passed over, and from the next on each side a transverse arch was carried across to the opposite side; and thus was formed a system of great vaults over the middle nave, one of which always answers to two bays in each of the aisles (Fig. 294). In this way the basilica received a quite new character. No

longer did its separate parts—the vertical, supporting portions and the horizontal, supported—stand in striking contrast to each other, but a fluent architectonic life caused the one movement to pass over into the other, gave to the whole a higher rhythmic organization, and, out of the hitherto monotonous row of arcades, formed a number of groups with marked breaks of the vertical lines (compare Fig. 294). The plan of transverse vaultings involved, of course, a strengthening of the supports on which they stood; and this additional strength was given to the piers in the form of a pilaster projection or an engaged column; and thus was developed a new structural form at once significant and artistically effective, whose technical and æsthetic advantages found universal acceptance (Fig. 295).

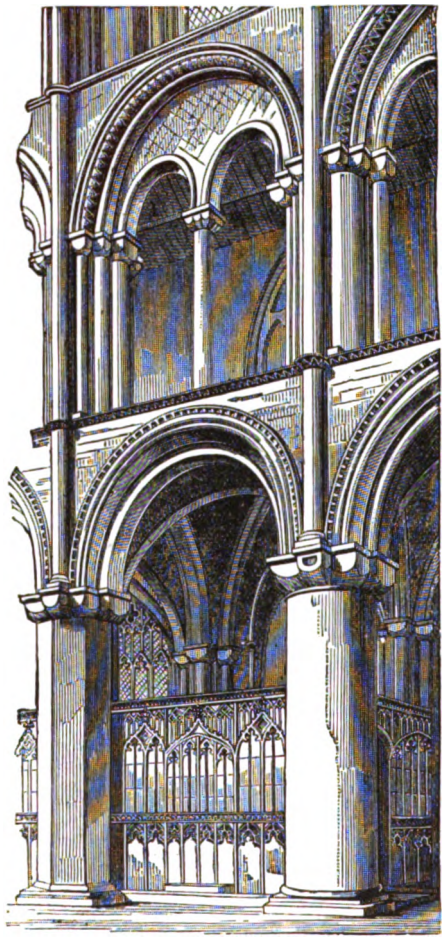


Fig. 295. From the Cathedral at Peterboro'.

As for the details of the Romanesque style, their general plan was the same, whether they were applied to flat-roofed or to vaulted basilicas. Where the column is introduced, it is, indeed, now and then, fashioned after the antique model; but as a general rule there is no æsthetic law for the proportions of the separate parts. And in this respect we find the utmost diversity. Sometimes the columns are thick and heavy, sometimes slender and elegant. The base is generally of the Attic form; but, as a rule, there is added to it at each angle a projection resembling a leaf, which, springing from the torus, spreads out, and fills up the empty angles of the square plinth (Fig. 296). This angle-ornament, commonly called a spur, is variously shaped,

being now a little block or boss, again a leaf, or the figure of some animal; often assuming some purely fantastic shape. Indeed, the different columns of one edifice, and even of one and the same arcade, exhibit a great diversity in the form of their angle-ornaments. The shaft of the column was not fluted, nor was its outline convex. At most, it was only reduced in diameter toward the top; and even this was not often done. Still we find—especially in the later, more exuberant development of this style—instances of highly ornate treatment; yet this does not affect the column itself, but is purely decorative, clothing the shaft with party-colored twisted bands, with playful lines, or spiral fluting.

The development of the capital is a still more important feature. Here the passion for exuberant and diversified play of form is especially observable. At first, an attempt was made to copy the Corinthian capital; but in most cases the imitation was crude and abortive: though now and then, wherever the influence of the antique was still strongly felt—as in Italy and certain portions of France — a higher degree of knowledge and skill was brought to bear upon the problem; and in a few places this mode continued to be dominant during the whole Romanesque epoch. Still these antique forms were of too foreign a type, and too delicate and ornate in detail, to suit the fancy of the Northern nations; hence another form of capital was devised, essentially Romanesque in form, which in a simple and effective way accomplished the transition from the round shaft of the column to the square abacus. This is the cubiform capital (Fig. 297); a form not wholly unlike the Byzantine convex capital, and like it, adorned with very flat and minute sculpture in low relief. While in its upper portion it is quadrangular, each of the four side surfaces terminates below in a semicircle; and the bottom gradually assumes the round form of the shaft. The abacus consists either of a plinth obliquely chamfered, or of a more complicated arrangement of members, chief among which are the echinus, the cove, the fillet, and other parts taken from the antique. But here, again, we find the utmost liberty

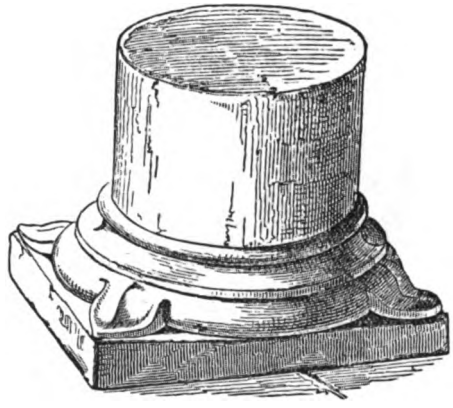


Fig. 296. Base of Column from the Cathedral of Parenzo.

allowed; and all manner of combinations are permissible, provided only they are effective. The surfaces of the cubiform capital in Northern Romanesque are left smooth, or are covered with abundant ornamentation, consisting of varied combinations of foliage, geometrical lines, and even figures of animals and men. Even historic scenes are often carved upon the surfaces of capitals.

Contemporaneously with this capital appeared another—the caliciform, or chalice-shaped—which was largely employed both in its simple and ornamented forms (Fig. 298). Finally, these two styles, the cubical and the caliciform, are often blended, their ornamental execution producing the most varied shapes.

Besides the column, the pier was largely employed, either alone, or alternately with the former. Its form is rectangular, and frequently square, terminating below in a base, which commonly has the same form as that in the Attic, and above crowned by a cornice having the same general outline, only reversed. Many other combinations—of members curved inward or outward, ovolos, flutings, small plinths, and narrow beads—frequently occur. Here, too, there is perfect freedom of combination. Generally there is an effort at giving to the entire pier a certain degree of lightness; but, in the process, its rectangular form is in almost every instance lost. The corners are slightly beveled, or one or more very slender columns are inserted in them. These little columns have capitals and bases of their own; but in order that they may form an integral part of the pier, some part of the crowning member of the pier is carried around it, including the colonettes, and there is a common base to the whole. This rich complexity of structure, which, without impairing the strength of the pier, gives it a more graceful appearance, is often continued along the arches of the arcade, giving a lighter look to their broad spans.

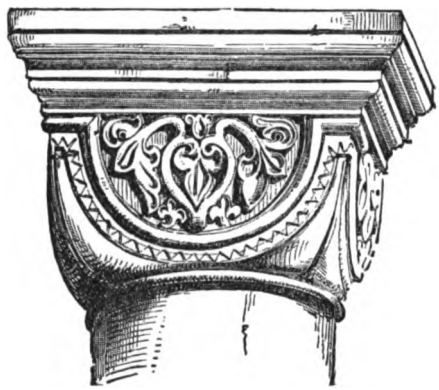


Fig. 297. Cubiform or Block Capital from the Cathedral at Gurk.

The exterior of the Romanesque church is built in sober, quiet masses, reaching a considerable height in the low side nave, the loftier middle aisle, and transept; while the tower overtops the whole. Narrow, pilaster-like buttresses were used to divide the wall-spaces, rising from the water-table, corresponding with the piers which mark

the intervals inside the building, and ending above in a frieze composed of small round arches, round the roofs of both side aisles and of the higher nave. These are sometimes flat, and are called pilaster strips; sometimes half round, like the engaged columns of antiquity. The arch frieze, an unmistakable mark of Romanesque buildings, is variously finished, often changing in the same structure; being used with or without corbels for the separate abutments of an arch, and varying greatly in richness of design; indeed, it is not uncommon for parts of the projecting band to rest directly upon the corbels without interposed arches. The corbels are also of infinite variety of

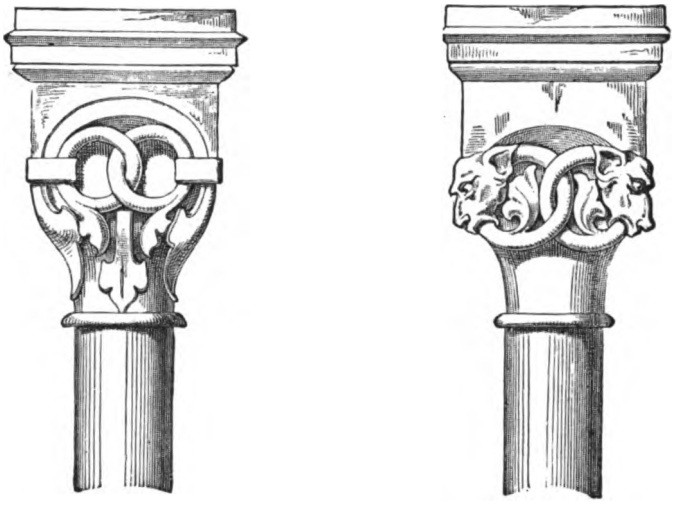


Fig. 298. Caliciform Capitals. Church at Horpacz.

form, from grotesque human heads to plain blocks. The cornice of the roof is added above, often accompanied by other ribbon-like friezes. Their most usual form was one made up of diagonally-placed stones (Fig. 299). The checkerboard frieze, consisting of several rows of stones alternately raised and depressed, is even more effective, as is another and similar frieze formed of short round rods alternated in like manner. In certain localities a number of consoles were added, in the antique manner, but of original design (Fig. 300). While at this time severe, solid masses of masonry were relieved only by engaged columns, arch bands, and mock arcades, pierced only by small, widely separated windows, the main apse—and, indeed, the other principal parts of the building—were often finished, as shown in Fig. 302, by a perfectly open gallery resting on miniature columns, forming a corridor around those portions, and not only lessening the

mass of masonry, but giving a lively and cheerful finish to the otherwise grave and positive character of this style of architecture. Besides this, the eastern portions of the structure received a richer treatment, appropriate to their innate significance.

The perfection of the façade was of special importance; an entirely new aspect being given to its composition by the direct addition of a tower. Two towers, in the earliest period round, but soon made square for the sake of more perfect connection with the church, were generally added to the two side aisles (Fig. 301). They inclose the broad middle portion of the front as in a strong frame, corresponding to the central aisle, and communicating with its main door. Sometimes the lower story was built in undivided breadth, pierced with great doors, and perhaps with windows, and finished with an arch-frieze; so that the separate members were only developed independently above this. But often the façade was divided by perpen-

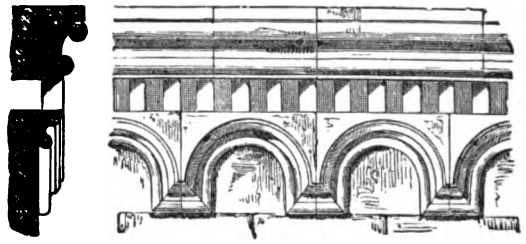


Fig. 299. Arch Frieze. Church at Wiener-Neustadt.

dicular pilaster strips to correspond to the internal divisions. The towers rose up in several stories, and were frequently enlivened with blind arcades. The upper stories of these towers were lighted by windows in twos or threes, and by window-like recesses in the wall, divided by small columns, which increased in number with the height, that the proportions of the tower might seem lighter and airier as it mounted. The tower was often octagonal in the upper portion, and the transition from the square substructure was accomplished in the simplest fashion by a steep slope.

The central door and commonly the two side doors under the towers had splayed or sloping jambs; or in place of these a series of small columns, set so that those at the outer face of the wall are farther apart than those within, thus still retaining the appearance of a splay. This splayed arrangement is carried around the arch, which thus has the general effect of half a funnel. It is not uncommon to fill up the semicircular head of the doorway with a slab of stone or a thin wall resting on a lintel. Where the opening of the entrance, as

often happens, is finished by a horizontal lintel (Figs. 301, 317), an arched panel is formed between this and the arch, which is called the tympanum, and is frequently filled up with sculptured subjects in relief, such as Christ enthroned between the figures of patron saints, evangelists, or adoring angels. Around the doors is generally developed the full splendor of the decoration, which not only wholly covers the shafts of the columns, but also the proportions of the embracing arches, with its varied patterns. A large round window is often introduced over the door, divided by spoke-like bars;

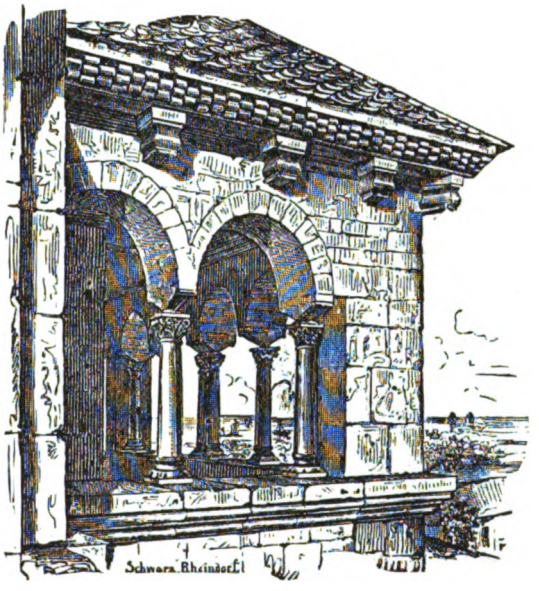


Fig. 300. Church at Schwarz-Rheindorf.

whence it receives the name of wheel window. The topmost part of the façade is either formed by the roof of the central nave, which then often emphasizes the lines of its gable with an ascending arch frieze, or else by a high gallery, which connects the towers. From these few fundamental principles, which undergo many variations, an earnest, solid, severe, and clearly proportioned style of façade is formed, richly developed wherever opportunity offers. The whole church-plan receives a significant finish from it, in which the chief forms of the interior are effectively united, and the spacious proportions of the whole structure are clearly expressed. Still the manifold conceptions of this endlessly varying style are by no means exhausted in these fundamental principles. A more varied and complicated arrangement of the towers, especially, enables the larger

abbeys and cathedrals to display an imposing and beautiful grouping. One important factor in this result is the circumstance that a dome-like structure, often octagonal, is reared over the intersection of nave and transept; this is built up on the outside from the main building

Fig. 301. Façade of the Church of Ják.

in octagonal, tower-like masses, crowned with colonnades, and finished off with a pyramidal roof. Slender towers are added at both sides of the choir, or at the end of the side aisle, in architectural connection with these domes, in which, indeed, there is an unmistakable trace of Byzantine architecture, however original its adaptation may

be, and however changed the details. The dome is often repeated over a second transept, also united with the towers, which gives an

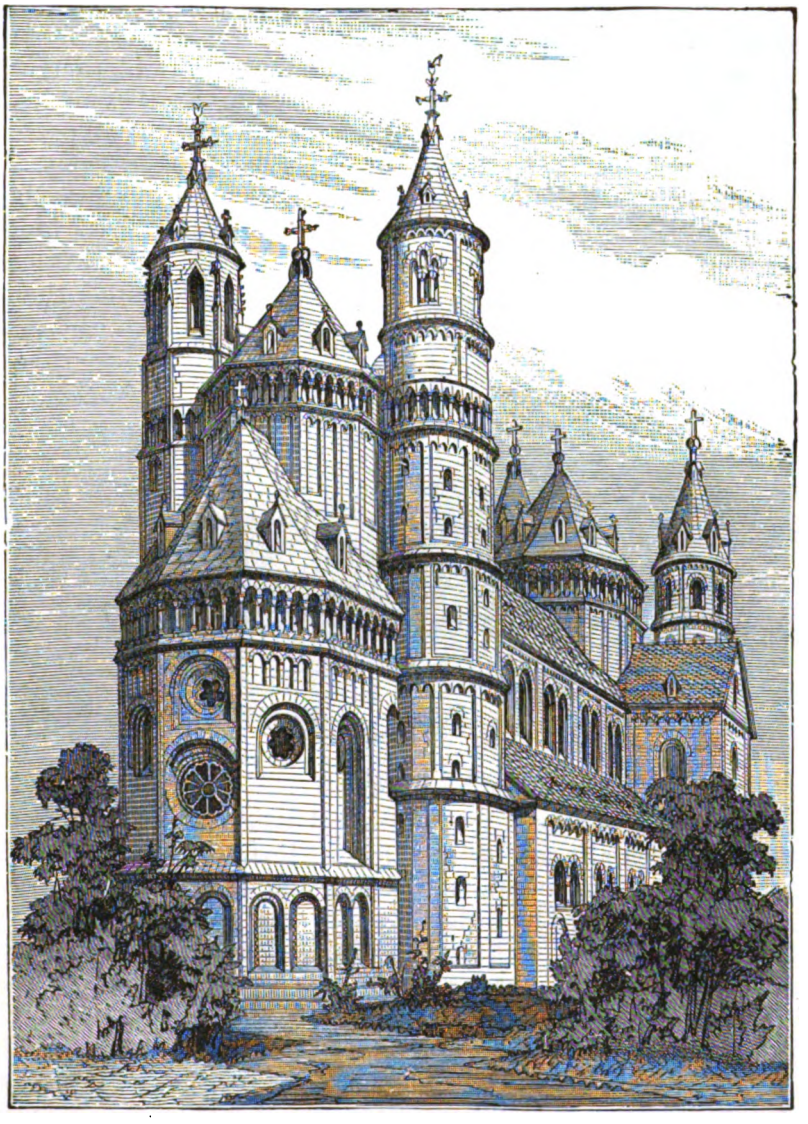


Fig. 302. Cathedral at Worms. (After Dollinger.)

uncommonly stately effect to the whole plan (Fig. 302). In the construction of towers, the Romanesque style shows great variety. It adopts as the head of the tower a spire of stone or wood; and in the

latter case it is covered with metal or slate, sometimes tapering, sometimes blunt, sometimes simple, sometimes rich, according as general progress or the special tendency of some local school prevails. In this, as in other points, the Romanesque style displays such power and depth of individual form, that only a slight idea of what was generally used can be given, since a closer idea of its full variety and fertility can only be gained by the study of separate local examples.

An unrestrained richness of ornament now spread over all parts of the structure, revealing its opulence in capitals, cornices, bases, and even in the shafts of columns. Vegetable life also lends its aid: vines, flowers, and leaves entwine the capitals and cornices in great beauty and variety. Yet the Romanesque foliage is never copied directly from nature, but is a system of scrolls and rosettes, suggesting Roman

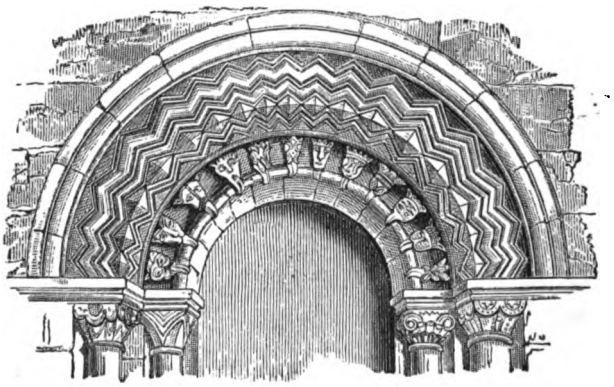


Fig. 303.

Imperial work, and also, at times, Oriental designs seen in textiles and the like. It generally consists of a delicate leaf, whose point, marked with lanceolate indentations, is spreading and gracefully curved, and whose veins are traced by little rows of beads. Besides this foliage, much linear ornament without natural form is also used on friezes and cornices, especially about the frames of doors—for instance, twisted and knotted ribbons; labyrinthine mazes; wavy, winding, zigzag and broken lines; scales; checkerboard patterns; and the like—in a brilliant profusion, and mostly in strong lines (Fig. 303). To these forms were added animal and human bodies, monstrous images of every sort—partly of symbolic meaning, partly wild flights of Northern fancy; and all this rich life is boldly and gorgeously intermingled in a fantastic medley, and expressed in powerful sculpture with sharp interchange of light and shade. Of course there is great diversity in the work, according to the time, place, and the material

employed; and crude, clumsy attempts find place beside skillful, bold, and elegant work. But, in the main, Romanesque ornament may justly claim to be original and independent. The fine, scholastic perfection of Roman antiquity is lost; but in its place we have an inexhaustible wealth and unconquerable freshness of fancy. It contrasts with the kindred school of Arabic ornament in its greater command of imagination, stronger characterization of form, and a wiser sense of limitation in their use. This vigorous style of sculpture is one of the chief points of superiority of Romanesque architecture.

If we consider church architecture in its general effect, according to these brief outlines, we are, first of all, agreeably impressed and attracted by the fresh life with which the people of Northern Europe have endowed the basilica pattern, and thus developed it into new forms. It is interesting to watch the development, out of the low and broad basilica with flat walls and a low-pitched roof, of the more ambitious Northern structure with steep roofs, lofty towers crowned with spires, broader towers covering the crossings and breaking the uniformity of the roof-lines; and all this rising from a substructure which is broken up and diversified in plan, having round and polygonal projections necessarily crowned with separate roofs of their own.

As sculpture did most active work in the organic structure, so, too, a great part was assigned to painting; walls, ceilings, and vaulted roofs being adorned with the glorious images of Christ, his apostles and saints. In the apse we generally find the Saviour enthroned upon a rainbow in an almond-shaped panel (the mandorla), upheld by angels, and showing the book of life to those who enter. He is surrounded by apostles, evangelists, the patron saints of the church, and figures from the Old Testament. These pictures were executed upon the dry plaster, and the figures generally stand out in bold colors on a blue ground. The architectural details, especially the capitals, also seem frequently to have been painted. A solemn tone, strengthened by the tempered light of the little windows, often broken by painted glass, reigns in the broad spaces, and greets, with an air of holy calm and a quiet sense of remoteness from the world, him who enters.

We have hitherto considered the Romanesque church structure as an isolated work. But the church of the years before 1100 A.D. was rather a part, although the most important and most solemn part, of a great whole, which developed in varied ways. Churches were mostly connected with convents, whose extensive buildings were attached to them either at the north or south. The monastery buildings and church were united by the cloisters: a covered corridor surrounding a court. usually quadrangular, and opening into it by groups of

windows, or rows of arches resting on miniature columns. To this was annexed a chapter room where councils were held, a refectory or dining-hall, and the various other rooms required by the every-day life of the monks. The whole precinct of the monastery was surrounded with walls and occasional towers, and, from a distance, might have been taken for a small city.

But even true church buildings of this date are frequent which deviate from the basilica form, and adopt a polygonal or circular design. Such is particularly the case with the baptisteries, or christening chapels, of cathedrals, for which a central or radiating plan was popular, and also with mortuary chapels; and even entire churches

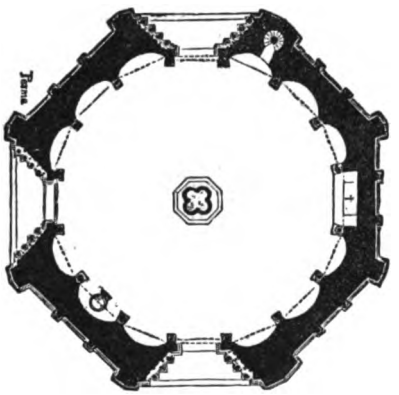


Fig. 304. Plan of the Baptistery at Parma.

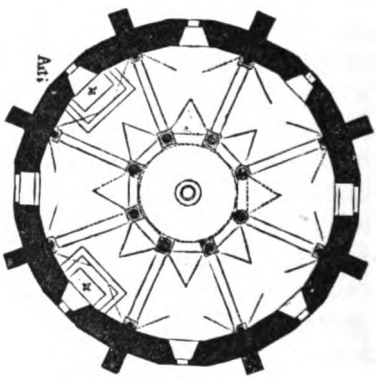


Fig. 305. Baptistery at Asti.

occur, which, though deviating in other points, incline to the circular or polygonal form. When they are without aisles surrounding the central and higher nave there is a greater wealth of chapels inside or outside (Fig. 304), and a more varied division of the space; but, if the space is divided by a ring of supporting pillars (Fig. 305), a higher central nave is formed, and surrounded by a low side aisle, arranged as a ring around the central tower-like mass. We also sometimes, especially in fortresses, find double chapels—i.e., two chapels built one upon the other—on the same ground-plan, which are sometimes connected by an opening in the floor of the upper one; the under one being occasionally arranged as a mortuary chapel.* Examples of this kind may be seen in the citadels at Nuremberg, Eger, Goslar, Freiberg on the Unstrut, and in the conventual church at Schwarz-Rheindorf, near Bonn.

* See W. Weingärtner, "System des christlichen Thurmbaues." Sutter, Conrad, "Thurmbuch."

As for secular architecture, it did especially good work in building of castles, in which the severe moderation of design, combined with a generally pleasing outline and mass, are noticeable. Conditions of defence and the accommodation of a garrison controlled all the dispositions, and therefore no delicate detail was added to these military structures; but the aspect of such a fortress, crowning a height, as, for example, in the older portions of the Wartburg, might be very stately, architecture as applied to private dwellings, during this period, only attained an enduring and artistic character in rare instances.

The restlessness which we have already noticed as characteristic of mediæval art produced a remarkable movement in the Romanesque style toward the close of its last flourishing period, which did, indeed, greatly impair the strong, pure character of that architectural school, accepting many admixtures of foreign forms, but at the same time held fast to the ground principles of Romanesque architecture, and, in fact, unfolded them with the utmost brilliancy, richness, and freedom. This is called the Transition style, because it is placed between the severe Romanesque and the Gothic styles. Its dominion was, however, limited to the period between 1175 and 1250, although even these dates are by no means applicable to all places; and this style appears in very different forms in various local works.

It resulted from the increasing call for more elaborate, richer, and more elegant works, for essential grace and beauty. Life had everywhere outgrown the stern conventual ban. Chivalry flourished. Cities began to feel their own strength and wealth. Trade introduced great treasures and a knowledge of foreign countries. The crusades also made the cultured laity familiar with the brilliant learning and architecture of the Orient. These men saw graceful, brilliant structures, dainty, piquant forms, and bold combinations; and all this must have made a deep impression on the receptive spirit of that age. We see the immediate introduction of Oriental forms into the architecture of Western nations; foremost among them, the pointed arch, long familiar to the builders of mosques in Syria and Egypt. But even those fantastic conceptions, the horseshoe and the scalloped arch—i.e., an arch edged with a row of small semicircles—appear, though seldom. The trefoil arch is found in doorways (Fig. 307), galleries, bays of cloisters; and is brought to special richness and beauty in cornices, where the simple round-arch frieze had hitherto prevailed. But even this was frequently used side by side with the newer form, though in richer outline; and with such lavish decoration that it fairly rivals it.

The pointed arch was not yet of equal importance in the develop-

ment of the new style. This pointed form, however, was sometimes called for by architectural combinations not at all connected with the coming Gothic style of vaulting. Thus the apse was often made polygonal, and roofed by a pointed vaulting, springing from a polygonal base, instead of a half-dome of semicircular plan.

There was a constant struggle for slenderer proportions and richer construction. This is shown in the vaulting, by the fact that the cross-ribs become more complicated in section, with round beads at

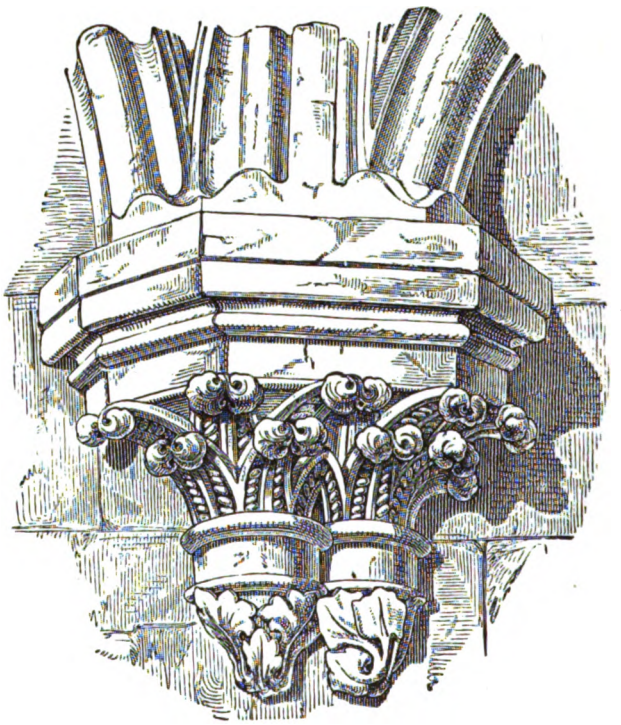


Fig. 306. Corbel from Heingkreug.

the angles, and strong semicircular ovolos, and occasionally in the deep fluting of the intermediate angles. Besides this, the arrises of the vault were furnished with rounded cross-ribs; so that the large surfaces of the vault displayed much more sharply marked divisions. The sections of the arcades of the nave became yet more lively and various, being made up of chamfers, sharp angles, and full round members. The finish of the piers, which was often embellished with a crowd of angle pillars and half-pillars, correspond to it. Nevertheless, the true normal execution of the nave pier, corresponding to the

newly invented vault form, rested on a regular cruciform plan; so that the sides of the piers, with their projecting half-columns, correspond to the cross-ribs of the vaulting; and the smaller angle columns, to the diagonal ribs. Slender miniature columns on the walls and at the wall-angles, or in the arcades of the transept, were especially and lavishly used—singly, in pairs, or several together. In the cloisters particularly, this often led to a brilliant architectural development, sometimes united with a perfectly designed division of the wall-spaces.

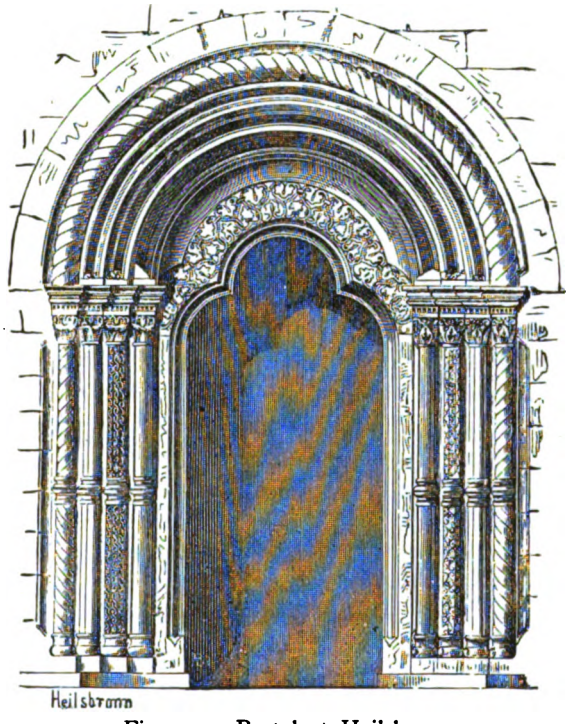


Fig. 307. Portal at Heilsbronn.

But in large churches, also, the more delicate finish of the piers, and the stronger division of the vaulting, produce an impression very unlike the severe and serious character of earlier edifices.

The struggle after stronger effect, already recognized as one of the leading traits of architecture, now pervaded all detail, and brought a brilliant finish with it, in the execution of the different parts and in their decoration. A striking effect, based on sharp contrasts, is aimed at in the bases of columns, in plinths and cornices, by means of deep fluting and undercutting, as well as by the sudden projection of the parts. The more delicate cup form prevails in capitals, and is beau-

tifully adorned with elegantly twined plants and bud-like, long-stemmed leaves (Fig. 306). Frequently, too, the column or the double column—sometimes the whole pier—is corbelled out, and rests upon a *cul de lampe* decorated with foliage (Fig. 306). The shafts of the long, thin pillars, used for a sub-division of the wall or at the doorway, frequently have a ring about the middle, formed of fluted and boldly projecting beads.

Lastly, we must notice that the windows shared in the general development. The tendency toward more freedom and grace is apparent in them; they become broader and longer, and are more frequently found in twos, threes, and groups, and sometimes united with a small round window above. The effort for more lively grouping, lighter effect, and the utmost possible perforation of surface, is evident in them. The restless spirit of longing for novelty introduced many new forms for windows—such as round ones inclosed in scallops, semicircular, lily-shaped, and fan-shaped; while the wheel-window reaches a higher perfection. The numerous recessed arcades of partly decorative character, commonly containing a range of columns surmounted by interlacing arches, constitute an important part of the subdivision of the walls. They are arranged in different ways, and frequently used for the decoration of the choir apse. The decorative tendency reaches its height in the case of the doorways, which are generally terminated by round arches, but occasionally by arches of a trefoil pattern, or else pointed, the pillars of which are profusely decorated on base, shaft, and capital, with a mass of ornaments of all descriptions. The same ornamentation is employed on the abacus, on the tympanum, and on the archivolt (Fig. 307).

The final development of the Romanesque style grew out of these elements, producing at times a beauty in which it attained its legitimate, free, and noble growth, but as often expressing merely a gaudy, fantastic, purposeless motive, and lending itself more to a decorative caprice than to the harmony of a genuine accomplishment; but always an illustration of the most inexhaustible fancy out of which spring a myriad shapes of individual beauty, braving the apparently rigid laws of the Romanesque style.

B.—GERMANY.

We are induced to begin our review of the most important monuments of the Romanesque style in Germany, by more than one consideration. In the first place, the new, independent development of the basilica structure is closely connected with the impulse given to life in that country by the strong dominion of the Saxon emperors

from 919 to 1024, and of the earlier sovereigns of the Franconian dynasty, immediately succeeding; in the next place, because the development of the basilica in Germany led, more than any other cause, to that definite form which, adhering to its original ideal, has always kept itself free from all fantastic and exaggerated tendencies; finally, because the Romanesque style has taken an especially deep root in Germany, and because it has sunk more profoundly here than elsewhere into the national life; the Gothic style having never replaced it completely, as in other parts of Europe. To be sure, there are differ-

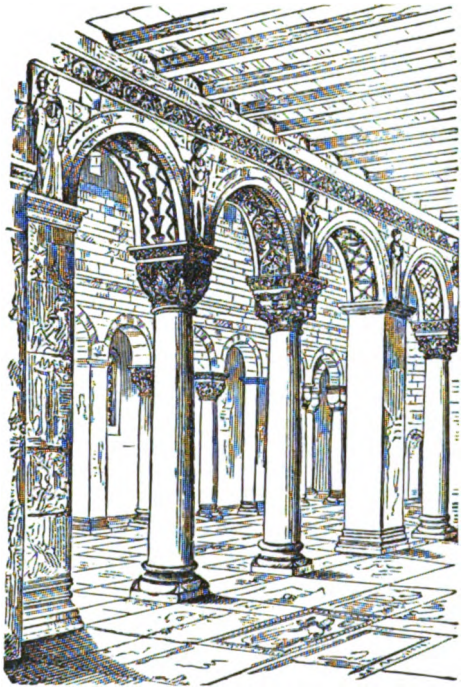


Fig. 308. St. Michael's Church at Hildesheim.

ences to be discovered even here, brought about by local peculiarities, by the inevitable march of development, and, finally, by variety of building material. Nevertheless, there remains an undeniable harmony in the whole German art development: it has, as it were, a single corner-stone.

Low-roofed basilicas, of stern simplicity of detail, exist in the Saxon parts of Germany, which, as genuine German provinces, are distinguished for the purity and exactness of their taste in all matters pertaining to art. The ground-plan of the basilica is generally in the

form of a transept with apses, a choir with a larger niche; in the nave a series of alternate columns and piers, and at the end of the nave two massive towers. The Church at Gernrode in the Harz Mountains is especially archaic and severe. It was built in the year 961, probably upon an older foundation, with some alterations. The transept is short. There are alternately columns and piers in the nave, the latter with clumsy, antique capitals. On the west side are two round towers, between which shows the high, clumsy main building, to which an apse was added at a later period. There are freer and nobler reminiscences of the antique in the details of the Castle Church at Quedlinburg, where two columns alternate with a pier with arches, and a prolonged crypt extends beneath the choir and the transept. The whole manner of execution illustrates the style of the eleventh century, already fully developed. A complete columned basilica of the advanced but still severe Romanesque style is that of the ruined Conventual Church at Paulinzelle, in Schwarzburg-Rudolstadt, in Central Germany, begun in 1105, with its glorious pillars, its high walls, and its magnificent vestibule of a later date—one of the finest ruins in the Thuringian Forest. Splendid examples of misdirected art, built in all the pomp of ornamentation of the culminating period of this style, are the Cathedral of Hildesheim and the Church of S. Godehard, dating from the year 1146, the ground-plan of which we gave above (Fig. 291). The choir of this church has an aisle with apses, and an octagonal tower over the square, which groups picturesquely with the two west towers. The Church of St. Michael, in the same place, is a good illustration of spaciousness. It contains two complete choirs with transepts; and apses, one of which has an aisle surrounding it; and with stately towers rising above both crossings; in addition to which, octagonal towers with winding staircases are placed at the gable ends of the cross-aisles, so that the church possessed originally six towers. The first foundation, in the year 1033—to which, in a general way, must be referred the whole plan of the structure—was followed in the year 1186 by a splendid rebuilding, conspicuous for its magnificence of decoration. Rich capitals decorated in various ways; elegant adornments of the intrados of the arches; statues above the capitals in the transepts, as well as on the chancel screen; finally, a magnificent painted roof of wood in the nave—all these still testify to the glories of this grand basilica (Fig. 308). Simpler illustrations of a rigid adherence to the same system of architecture, with fewer decorations, are the conventual churches of the Cistercians at Loccum in Hanover and at Riddagshausen in Brunswick, both with rectangular choirs; to which, in the Church at Riddagshausen, is added a surrounding aisle and a wreath of chapels.

On the Rhine,* one of the most noted basilicas with columns is the Conventual Church at Limburg on the Hardt, founded by the Emperor Conrad II. in the year 1030, but now only a picturesque ruin. High pillars, with simple cubic capitals, separated the nave, 40 feet in width, from the transepts; the choir was rectangular, and the

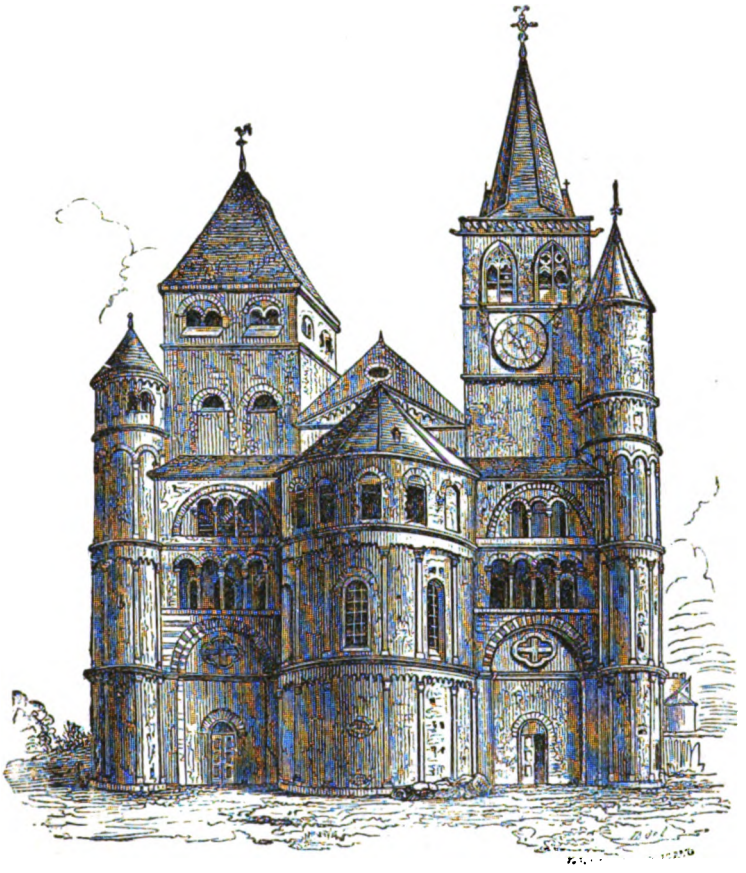


Fig. 309. Cathedral at Trier (Treves), Western End.

west façade provided with a porch. The western part of the Cathedral at Treves illustrates, in its massive simplicity, the earnest and impressive style then aimed at in the exterior of buildings. This cathedral was begun by Archbishop Poppo, and finished in 1047 (Fig. 309). The Conventual Church of Hersfeld in Hesse, built in

*Geier und Görz, "Denkmale romanischer Baukunst am Rhein." Boisserée, "Denkmale der Baukunst am Niederrhein." G. Moller, "Denkmäler deutscher Baukunst"; continued by Gladbach. C. W. Schmidt, "Baudenkmale von Trier."

1037, belongs to the most famous columned basilicas in Germany. Columned basilicas exist in the Swabian provinces,* which correspond to Baden and Würtemberg with the western part of Bavaria; as at Hirschau (dating from 1071, a ruin which has been thoroughly explored), at Schwarzach, at Faurndau; and also in the Church of St. George, at Hagenau in Alsace. The Cathedral at Constance on the Lake of Constance, and the Minster at Schaffhausen on the upper Rhine, are still further examples. Bavaria† and Franconia possess magnificent columned basilicas in the Cathedrals of Würzburg and of Augsburg, which still uprear their ancient fair proportions in spite of modern alterations. After these may be mentioned the structures in Regensburg (Ratisbon), built upon a rigidly classical plan—as the Church of St. Stephen, formerly the Cathedral and very near the later Cathedral; with the vestibule and crypt; also the ruins of the church of St. Emmeram, as well as the churches of the *Oberminster*, and the so-called Scottish Abbey — a Benedictine monastery dedicated to St. James, remarkable for its singular door. In Austria‡ the original basilica style is illustrated by St. Peter's at Salzburg, built after a fire in 1127, and by the ancient abbey church at Seckau in Styria, restored 1154, both of which have vaulted transepts; and by the Cathedral in Gurk (ground-plan, Fig. 292); a simple, pillared basilica of the end of the twelfth century, with a superb marble crypt containing a hundred columns; finally, the Cathedral at Fünfkirchen in Hungary—a stately columned basilica, built, like the former, without a transept, with three apses in a row.

In Germany, the vaulted roof first gained the day over the flat-roofed basilica in the Rhine provinces. First in order comes the Cathedral at Mayence (Fig. 310)—a magnificent building, the original plan of which was a colossal, flat-roofed, columned basilica with two apses, a western transept, two towers on the sides of the choir, and two larger towers above the two crossings. This church exceeds in grandeur all other Romanesque buildings in Germany. The nave is 50 feet wide in the clear, and the interior length of the whole building is 415 feet. The proportions are unusually slender, and a marked expression of lightness is conveyed by them. The present vaulted roof belongs to a later restoration; and the imposing plan and elaborate execution of the west choir, as well as the transept, are conspicuous instances of the period of transition; whereas the eastern portions, with

* Heideloff and Müller, "Schwäbische Denkmäler"; continued by Leibnitz.

† I. Sighart, "Geschichte der bild. Künste im Königr. Baiern."

‡ G. Heider, R. v. Eitelberger, and Hieser, "Mittelalterliche Kunstdenkmale des österr. Kaiserstaates"; vols. i., ii. "Jahrbuch der k. k. Central-Comm."; Vienna, 1856. "Mittheilungen der k. k. Central-Comm."; edited by K. Weiss. Yearly volume for 1856. Publications begun some time since by E. Fürst Lichnowsky, as well as by Ernst and Œscher, remain uncompleted.

their apses, the two doors, and the two round towers which flank the building, most probably date from an earlier period in the eleventh century.

So splendid a model could not long remain unimitated; and we

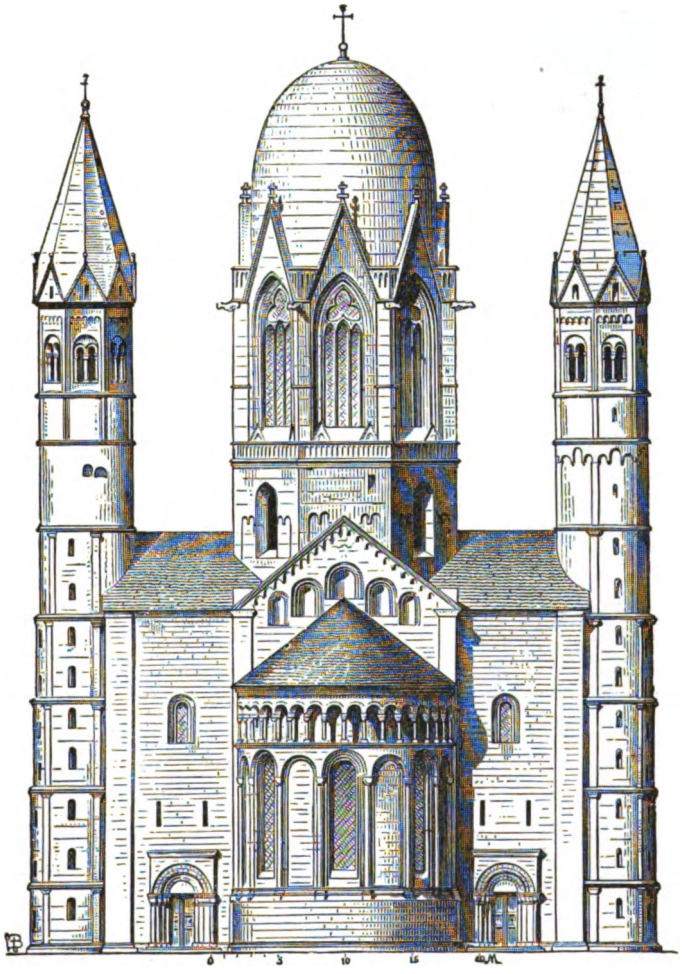


Fig. 310. Cathedral at Mayence with Gothic tower, since replaced.

accordingly find the neighboring Cathedral of Speyer (Fig. 311), towards the middle of the twelfth century, improving upon its ancient plan by a similar restoration. This superb building, no less impressive and grand than its rival of Mayence, is one of the most historically interesting of the monuments of the Middle Ages, being closely associated with the greatness as well as the disgrace of Ger-

many. It was begun by Conrad II.—on the same day as the Abbey at Limburg, already referred to—in the year 1030, and was designed to be the burial place of the German emperors. The place of sepulture was a long crypt, extending under the choir and the

Fig. 311. Cathedral at Speyer.

transept, which still remains to testify to the original design. The building of the enormous church was carried on by succeeding emperors during almost a century; the width of the central nave being 44 feet, and the length of the structure measuring 418 feet. The vaulting, according to the investigations of Hübsch, was begun at the time of the original construction, and follows the general arrange-

ment of the Mayence Cathedral, although it embodies a sentiment of greater power and energy. The exterior corresponds in grandeur with the interior. An attractive gallery is carried round all the principal portions of the building, and the arrangement of lofty domes and towers is in accordance with that picturesque spirit of Rhenish architecture which delights in the grouping of imposing masses. The ancient imperial crypt, and the magnificent cathedral itself, were laid in ruins by the French troops when Louis XIV. devastated the Palatinate in 1689. For almost a century the monument of the German emperors lay blackened and crumbling, until a restoration was undertaken in the year 1772, during which the western narthex, called the Emperor's Hall, especially was altered and reconstructed according to the decorative forms of that day. King Ludwig I. of Bavaria restored the cathedral about 1850 and caused it to be decorated with frescos; the Imperial Hall has also been judiciously restored.

The Cathedral at Worms is a third important monument of this series, and dates, to judge by the magnificence of its original plan, from an early epoch; although it was restored during the twelfth century, and consecrated in 1181. In the design and execution of its most important characteristics it suggests alternately the Cathedrals of Mayence and of Speyer. The exterior is marked, as in our former examples, by the double choir with two domes, and by four round spires with winding staircases. The best portions are executed in the florid style of the transition period. An illustration of the exterior is given in Fig. 302.

Passing down the Rhine, we come upon a vaulted structure of similar characteristics in the smaller but harmonious and beautiful Abbey of Laach, which was completed in the year 1156. The square division of the ground plan has been abandoned in this case. The picturesque appearance of the exterior of the church is heightened by six towers of different heights and shapes. Next, the Church of Schwarzrheindorf,* near Bonn, may be mentioned as an instance of very original design. It consists of a small, attractive main building, which was enlarged at a later period. It is further remarkable as a double church, and is rendered extremely picturesque by a gallery which runs around its whole extent (Fig. 300).

The church edifices in old Cologne offer a design of a different character, but are even more artistically remarkable. The Church of Santa Maria im Capitol, so called from its location within the ancient Roman citadel, is one of the earliest and most important monuments; it was consecrated by Pope Leo IX. in the year 1049.

* A. Simons, "Die Doppelkirche zu Schwarzrheindorf"; Bonn, 1846.

The principal part of the present building dates from this period; although the vaulting of the central nave and the upper parts of the choir and of the transepts recall the style of the thirteenth century. The arrangement of the building is original. The choir and the two transepts end in round apses, but are encircled by low aisles, which

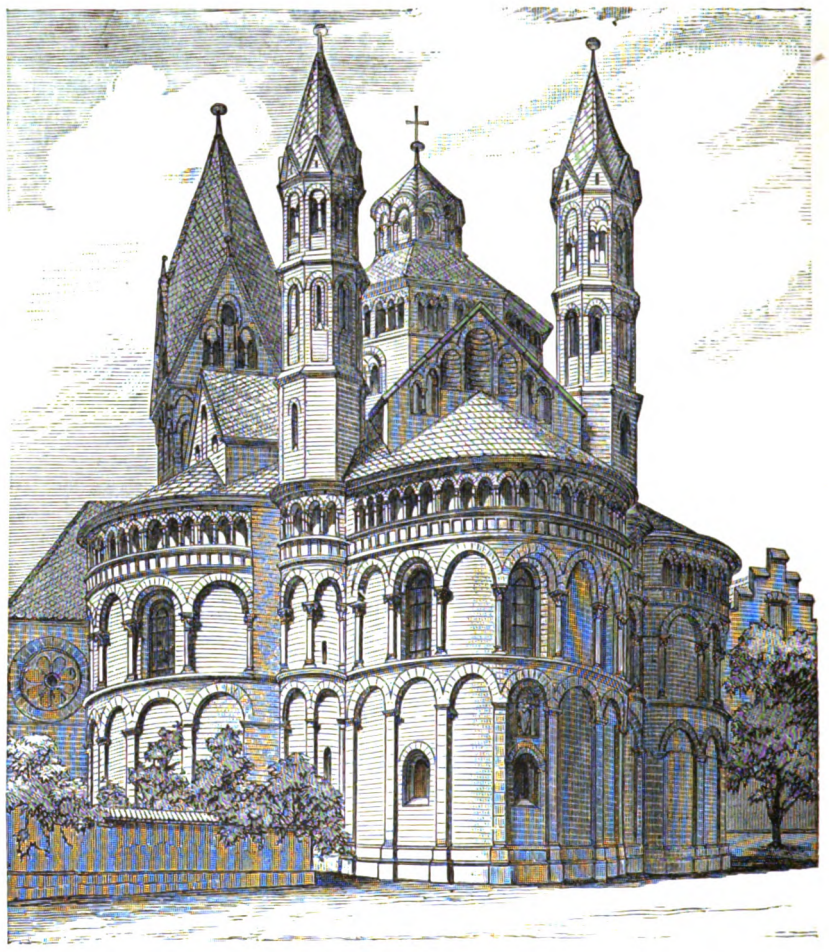


Fig. 312. Church of the Holy Apostles at Cologne. (From Dollinger.)

are separated from the clear story by columns. The cross vaulting of these aisles, and the large, differently constructed vaultings of the central spaces, afford a surprising proof of the thoroughness with which all technical details were mastered at that period in Cologne. The effect of the interior is in the highest degree solemn, earnest, and yet spirited; this being chiefly due to the fact that the eastern

portions of the church are symmetrically disposed about the crossing as a common center. This centralization of the choir end of the church was further adopted in the course of the twelfth century in the case of two other churches in Cologne — that of the Holy Apostles (Fig. 312) and the "Gross S. Martin," formerly a conventual church. In both of these the transepts are shortened, the aisles surrounding the choir are omitted, and the whole plan is more concentrated. In both the walls are broken up, relieved, and divided, by niches in the walls, by galleries, and triforiums; and the exteriors of both are ornamented in the very richest manner. But there is this difference between the two, that the main building of the nave in the Church of the Apostles is crowned by a wide octagonal cupola, flanked by slender spires; while an enormous quadrangular tower soars above the center of the transept in the Great St. Martin's Church, at the corners of which are four turrets. This is one of the finest mediæval towers in Europe, 270 feet high and of noble proportions. Other structures in Cologne bear even more emphatically the stamp of the transition period, especially in the intermixture of the pointed and round arch and in other details of form. The most interesting of these is the Church of St. Gereon, which, about this time (1212-27), added a new decagonal nave to its long, projecting choir, which was raised above a crypt, and flanked by two towers. This unusual form, which is evidently the result of the retention of an ancient circular structure, presents a wreath of semicircular chapels, surmounted by a gallery, entirely in the spirit of the other buildings in Cologne of the same epoch that have been already described. At the same time, a new order of architecture is indicated—the Gothic—at this time in full development in the French lands not far away, and already invading Germany.

The neighborhood of Cologne is rich in monuments of the last epoch of the Romanesque. One of the most original in composition, and at the same time the most magnificent, is the Abbey of Heisterbach, situated in a green valley of the Siebengebirge. This abbey was destroyed in the beginning of the present century, and only exists now as a picturesque ruin. It was completed in 1233, and belonged to the order of the Cistercians. Like all the best known institutions of this order, it possessed a very sharply defined individuality. Especially the choir, ruins of which still remain, has the peculiarity of an aisle completely surrounding it, and separated from the main building by a double row of columns; while attached to the aisle was a series of semicircular chapels, considerably lower, and built into the thickness of the wall. The exterior of the build-

ing thus presented the appearance of a pyramidal structure of several stories. An immense nave, with two transepts, and with rows of chapels opening on either side, extended from the imposing choir. The Minster at Bonn belongs to about the same time. It is no less grand, and is at the same time much richer in

Fig. 313. Cathedral at Limburg.

detail. The exterior produces a delightful impression, with its choir of an older date, its polygonal transepts, and its five towers.

Finally, the influence of the Romanesque style is distinguishable in important buildings in the Middle-Rhine provinces. Such are the Parish Church of Gelnhausen, to the flat-roofed nave of which was added about this time a handsome choir, adorned with galleries and two slender towers; and more particularly the Cathedral of

Limburg on the Lahn, consecrated in 1235, which is a superb example of the Rhenish transition epoch (Fig. 313). It is of very moderate dimensions, the whole length of the interior measuring only about 165 feet, and the width of the nave being only 25 feet; but the interior architecture is carried out with so much vivacity and spirit, that the Rhenish style finds in this church its most magnificent embodiment. The nave and choir are lighted by galleries and triforia, the choir even having a complete corridor about it; while the exterior has two enormous west towers, a stately domed tower over the transept, and four slender spires at the ends of the arms of the cross.

As far as can be ascertained, vaulted buildings did not appear in the Westphalian and Saxon provinces* earlier than the last decade of the twelfth century. All that is aimed at in the buildings of this region is the simple embodiment of the useful; all needless ornamentation is done away with; but special attention is given to the disposition of the essentials of the structure, and particularly to the piers, in the arrangement of which as much variety and expression as possible is attempted. The Cathedral at Soest has vaultings in the Romanesque style added to the primitive flat-roofed nave; also a western vestibule belonging to the last epoch of this period, with an immense tower; the whole eminently imposing. The transition period is also well represented by the restoration of the Osnabrück Cathedral, and still better by the Münster Cathedral, which was restored in 1225-61. Bold, wide arches, double transepts, and a gallery around the polygonal choir (the clear story of which has a triforium), impart to the building a stately magnificence as simple as it is impressive.

An entirely different architectural system prevails in other churches of Westphalia, the transepts being carried up to the full height of the nave, which thus loses its clear story, and with it the means of lighting the nave independently; the whole assuming the character of the hall churches, a form always popular in Germany. The Minster at Herford and the Cathedral at Paderborn are the most famous of these hall churches, each retaining a characteristic Westphalian arrangement in the rectangular choir.

In the Saxon provinces† an excellent example of the blending of vaulted roofs with the strict old basilica structure is the Cathedral at Brunswick, a foundation of Henry the Lion, dating from the year 1171. This is of special interest owing to its roomy crypt, and to the paintings on the vaulting of its choir and transept. In the neigh-

* W. Lübke, "Die mittelalterliche Kunst in Westphalen"; Leipzig, 1853.
† Consult the before-mentioned work of Von Puttrich.

boring Church of Königslütter (Fig. 314), which possesses one of the finest cloisters, very peculiarly arranged with a double corridor, the eastern portions, at least, were originally vaulted. The Cathedral at Naumburg, consecrated in 1242, illustrates the transition period in its most artistic phase. It is an edifice of massive proportions, with two choirs and four towers; characterized, moreover, by a superb Romanesque choir screen. The elaboration of details is here carried out with freedom and spirit. But the glorious Bamberg Cathedral attains to the perfection of the Romanesque transition style of Ger-

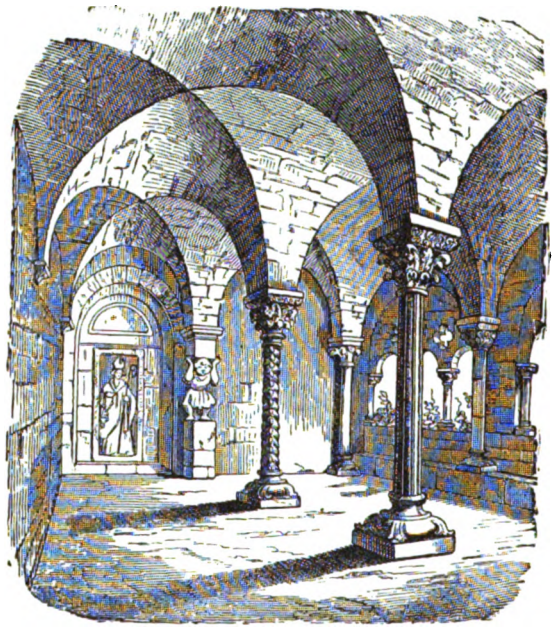


Fig. 314. Cloister at Königslütter.

many as carried out in Franconian buildings, and blends in a climax of beauty the excellences of the Rhenish and the Saxon schools. The plan of this cathedral is magnificent, the proportions large and imposing, and yet with a noble freedom and lightness in its upper portions. Here again are two stately choirs, one at each end, and each finished with a projecting apse, and each flanked by a pair of superb towers, the western choir further distinguished by a spacious transept. The distinct divisions, the pure proportions, the bold elevation, the rich decoration covering cornices and doors with a wealth of joyous and noble magnificence, give to this building a place in the foremost rank of the architectural creations of the Middle Ages.

The Church of S. Michael at Altenstadt, in Bavaria, follows next, as a Romanesque building, among the vaulted structures of Southern Germany; also the Cathedral of Freising, in which the imagination of the South German school developed an elaborate system of ornamentation. In Swabia, the Church at Ellwangen* stands out as a handsome, vaulted columned basilica of the culminating period of Romanesque art: it is remarkable for a ground plan exceptionally fine for South Germany, recalling certain Saxon churches, especially that at Königslütter. A choir, with crypt, side choirs, and transepts, flanked by two towers, and surrounded by five apses and a western vestibule, above which rises a third tower, are the distinctive features of this noble structure, and without doubt may be referred back to Saxon prototypes. The Minster at Basle† is an important building in the style of the transition period. It was enlarged in the Gothic period to a building with five naves. The polygonal choir with a gallery, and the triforia above the arcades of the nave, bear the unmistakable stamp of the later Romanesque period. The great Minster in Zurich is more severe, and of an earlier date—before the end of the twelfth century; but its more recent cloister displays far more wealth of composition and of eccentric ornamentation (Fig. 315).

The system of vaulting began at a very early day among the churches of Alsatia, which present a group as attractive as remarkable, and represent German characteristics on the borders of France.‡ The Church of Ottmarsheim, in the severe style of the eleventh century, is a close copy of the Carlovingian Minster at Aix. The Abbey of Murbach, dating from the beginning of the twelfth century, is situated in a pleasant valley near Gebweiler. It has a rectangular choir and two east towers, and is distinguished by a genuine artistic, albeit severe, execution. The Church at Rosheim exemplifies a still further stage of development. It has round-arched, ribbed vaultings, supported by simple pillars, which alternate with robust columns. An octagonal tower rises from the transept, such as continually occurs in Alsatian edifices. The Church of S. Fides at Schlettstadt resembles this in treatment, except that the arches are pointed, and rest upon a row of piers ornamented by engaged columns; while in the places of the intervening columns themselves, a pillar composed of four semi-columns is introduced. The arcades have

* K. A. Busl, "Die Stiftskirche und die Stiftsheiligen Ellwangens"; Ravensburg, 1864.

† For the Swiss buildings consult J. R. Rahn, "Geschichte der bildenden Künste in der Schweiz"; Zurich, 1874-76.

‡ On the architecture of Alsace consult Lübke and Lasius in the *Allgemeine Bauzeitung*, 1860; and Woltmann in Lutzow's *Zeitschrift*, vol. vii. Also Woltmann, "Geschichte der Deutschen Kunst im Elsass."

pointed arches; whereas everything else about the building, especially the vaulting, is in round arches. On the west is a pretty vestibule between two towers; a third octagonal tower rises above the transept. The Church of S. Legerius at Gebweiler has a similarly situated tower, excepting that it constitutes on the west side a picturesque, open vestibule with three naves. In interior construction, this church recalls that at Schlettstadt. Its pillars, however, are more fully developed, and the pointed arch of the transition period prevails in the arcades and vaultings. The Church at Pfaffenheim has re-

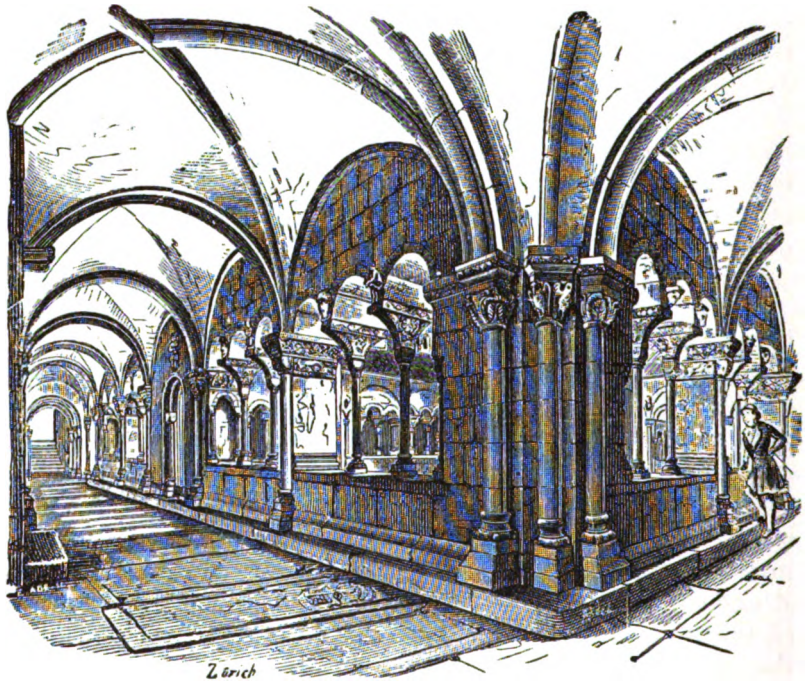


Fig. 315. Cloister in the Great Minster at Zurich.

ceived the addition of a handsome choir of the same epoch. The Church at Maursmünster offers a fine example of the vestibule that is such a favorite in Alsace. It has also three stately towers, which impart a marked character to the excellently composed façade. The eastern portions and the transept of the Minster of Strasburg are creations of the Romanesque transition period; to which epoch belong also the choir and transept of the Church of St. Stephen in the same town.

The last epoch of the Romanesque showed itself with especial richness and pomp in the Austrian States, developing a splendor of

imagination and a profusion of ornamentation which entitle the masterpieces of this group of structures to rank with the finest works produced by the Romanesque style. The façade of the Church of S. Stephen in Vienna, with its splendid giant doorway, as well as the noble nave of the Church of S. Michael, date from this time. An important monument is the Cistercian Abbey Church at Heiligenkreuz; distinguished, moreover, by a beautiful cloister. This is in severe but consistent vaulted Romanesque style; the choir added to

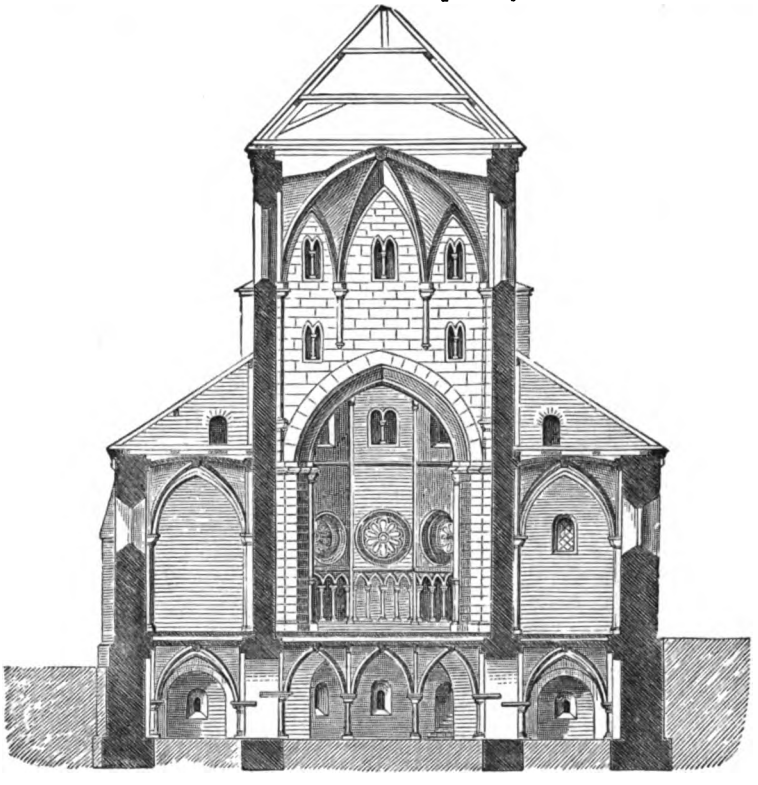


Fig. 316. Church at Trebitsch. (Cross-Section.)

and enlarged at a later period. Another handsome church of this order at Lilienfeld belongs to this same period. Its vaulting, with the addition of the pointed arch, shows an advance to freer treatment; and its imposing choir has a surrounding aisle, considerably adding to its original design, and belonging to a later time. A cloister of greater richness heightens the effect of the whole plan. A third cloister, fully worthy to be compared with the two above mentioned, is that of the Cistercians at Zwetl, in lower Austria; it also belongs to the late Romanesque epoch. Two cloister churches

in Moravia have also recently been made known, which develop new features in the splendid architectural designs of the Austrian States. The Benedictine Abbey of Trebitsch, north of Vienna, has a church (Fig. 316) in which the style of the transition period has produced surprising results by means of original conceptions. The pointed arch prevails in the arcades and vaultings; only on the doors and windows it alternates with the rounded arch. The vaultings of the choir are of polygonal shape, as well as a vast vestibule with a gallery; and the entire eastern space is, moreover, made especially noteworthy by an extended crypt. The frieze of the arch of the principal apse is a special illustration of the rich and even lavish

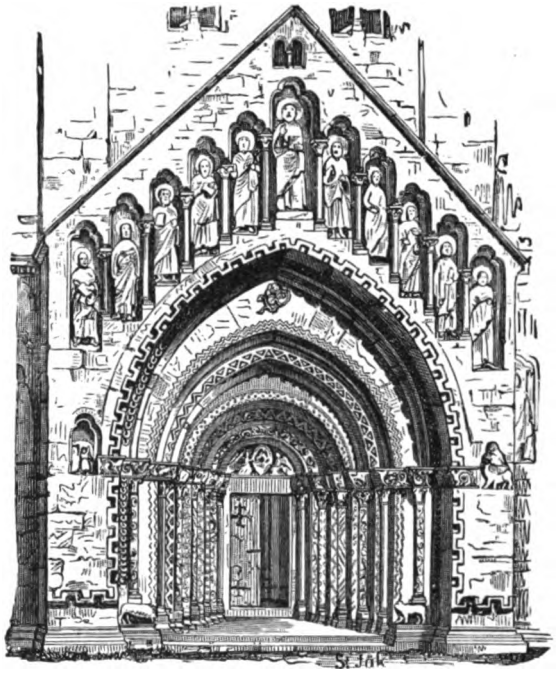


Fig. 317. Church of Ják.

ornamentation of the whole building. The principal door on the north side, however, has received the greatest profusion of decoration. It is round-arched, and broad rather than tapering, and with its sixteen pillars, with its archivolts and the angles of its piers richly covered with scroll and leaf ornamentation, one of the most magnificent efforts of the Romanesque style. Another Moravian edifice, the Cistercian Nunnery at Tischnowitz—completed about 1238—is a specimen of the fully developed transition style on a simple plan,

and with the characteristic severity of execution peculiar to this order. However, a nobly constructed cloister and a western portal belong to this building, which in elegance of proportions and in the profuse wealth of beautiful wreathings far exceed the formal leaf-ornament and sculpture of the doorway of Trebitsch.

We find this superb style penetrating far into Hungary and the Province of Siebenbürgen; and only the mountain line of the Transylvanian Alps has established a barrier between the Romanesque and the Byzantine art. The masterpiece of Hungarian architecture is the Church of Ják, south of the Danube (compare Fig. 301), a vaulted building, thoroughly in the style of the transition epoch, of noble proportions, and whose richly decorated west door (Fig. 317) compares in magnificence with the doors of Vienna, Trebitsch, and Tischnowitz, already mentioned, and surpasses them as to original design. The cathedral at Karlsburg in Siebenbürgen is in the simple, intelligible style of the monuments of Central Germany, such as the Cathedrals at Naumburg and Bamberg, with vaultings of noble proportions, and with its different parts admirably disposed and emphasized by appropriate decoration.

The buildings of Northeastern Germany* furnish a thoroughly characteristic group. Long after Western, Southern, and Central Germany had reached a high plane of development, the Slavonic races inhabiting those provinces remained resolutely hostile to the Christian-Teutonic efforts at civilization. It was not until during the twelfth century that Christianity was fully established here, and a new way of life was opened through the influence of German colonists. The developed Romanesque style, then employed in the neighboring Saxon countries, was made use of in all works of architecture. However, nature had not supplied the plateau of Northern Germany with stone ready for use; and it was therefore necessary to make good the deficiency by a substitute, which was not without great influence upon the adaptation of the forms employed. At first the attempt was made to use, in building, blocks of granite which are found scattered over the entire North German plateau. But this extremely hard material was so difficult to work, that the results were clumsy and unpleasing; and therefore recourse was had to bricks, with which the buildings were completed. But, inasmuch as the bricks could only be baked of moderate sizes, all imposing and vigorous finish of the

* F. v. Quast, "Zur Charakteristik des älteren Ziegelbaues in der Mark Brandenburg." *Deutsches Kunstblatt.* F. Adler, "Mittelalterliche Backsteinbauwerke des Preussischen Staates." Folio, Berlin, 2 vols. Strack and Meyerheim, "Denkmäler der Altmark." Text by F. Kugler. A. von Minutoli, "Denkmäler mittelalterlicher Kunst in den brandenburgischen Marken." F. Kugler, "Pommer'sche Kunstgeschichte, in den kleinen Schriften." Vol. i.

different portions was prevented; and hence the desire for artistic display was forced to take refuge in a system of flat ornamentation. A picturesque variety was frequently produced by the use of differently colered glazed bricks. The buildings remained unadorned exteriorly and internally, and simply in the rough finish of the material; and the general effect of the calmer, more massive plan, and of the subdued

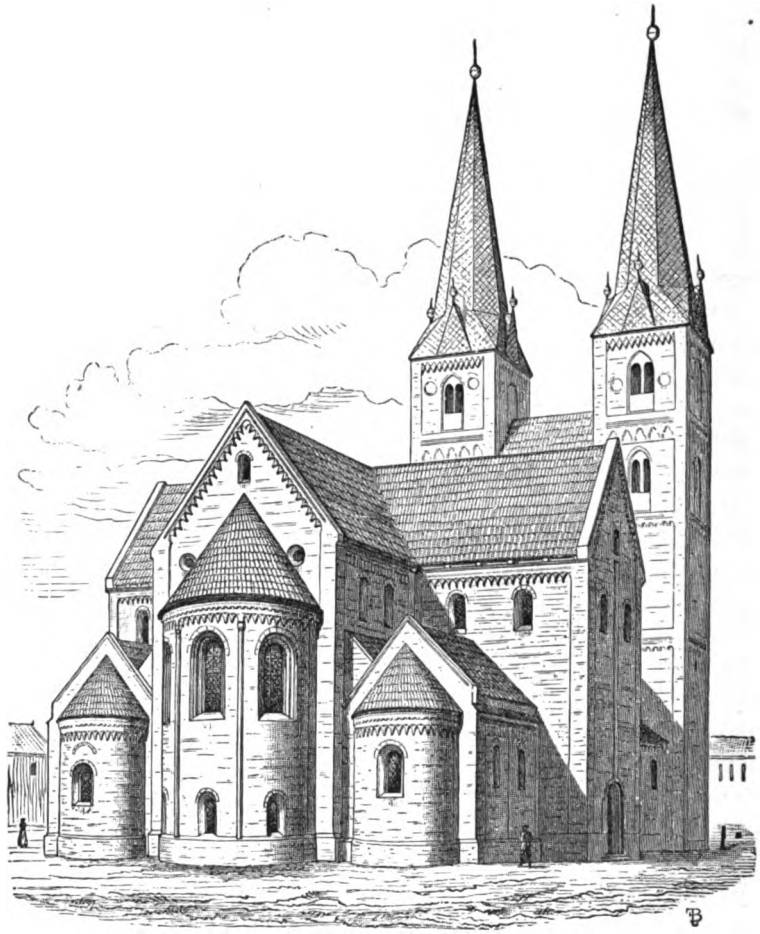


Fig. 318. Monastery Church of Jerichow. (From Adler.)

coloring, was unusually impressive and dignified. There were changes also, however, in the details of the work. The columned basilica was now seldom used; the piered basilica was employed almost to the exclusion of the older style, and received a new expression through the use of half-columns and other features. The bases were also simplified,

and the capitals made suitable; although it was a difficult matter to translate the cubic form into the clumsier character necessitated by the use of bricks. Sometimes, to be sure, hewn stone was made use of for purposes of detail; such finer, more spirited forms resulting therefrom as could be produced by the skilled chisel. The friezes and moldings give a completeness to the cold surfaces of the exterior. These were fashioned either in the form of round arches, or else a frieze was used, designed in intersecting rounded arches. Occasionally there is a plain frieze constructed of single bricks, arranged in triangular or else in rhomboidal patterns. Small corbels are also used in this connection; and a pattern composed of small stones laid cornerwise upon each other, in layers, is employed with good effect as a finish.

The Convent Church at Jerichow in the Altmark, near Magdeburg, (Fig. 318), is one of the best preserved and most characteristic in that region. It is a severely simple, wooden roofed, columned basilica, with a lofty choir, and a large crypt with pillars of sandstone, having, at the sides of the choir, chapel-like spaces with apses; the entire exterior excellently executed; friezes and moldings richly worked out; the west building supported by two slender towers. Under the monastery is the splendid chapter house and the still more magnificent refectory. The vaultings are supported upon richly decorated sandstone pillars, which in the refectory have very elegantly finished capitals; the whole in good preservation, in spite of rough treatment in modern times. The Cathedral of Brandenburg, west of Berlin, with its crypt of hewn stone, is a plain pillared basilica, originally covered by a flat roof. The Conventual Church of Arendsee, near Jerichow, is a Romanesque vaulted building, consistently executed; while the Ratzeburg Cathedral, in Lauenburg, near the Baltic, is tempered with the style of the transition period, and corresponds, to a certain extent, with the plan of the Brunswick Cathedral.

FRANCE.

In France, also, we are met by a spirited variety of architectural structures, which, taking the Romanesque as their starting point, afford a further proof of the variety of which this style is capable. A devotion to classical forms, which surpasses even that of Italy, is, however, apparent in this country, rich in antique traditions as it is. Not only details of decoration, but also the main features of construction, are borrowed from the Romans; and at a very early stage the wooden roof of the basilica yields to vaultings, cylindrical or domed, the construction of which was carried on more symmetrically and consistently in France than in any other country. The

magnificent buildings of Roman antiquity, still well preserved, down to the twelfth century at least, probably gave the first impetus to this tendency, which the intelligent, practical spirit of the French people proceeded to emphasize and develop. But several schools contend for superiority upon this ground, and the contrast between the peculiarities of the North and South is especially conspicuous.

It is in Southern France that we find the almost universal adoption of the tunnel vault. This is so combined with the basilica form of church that it covers the central nave throughout the whole length of the main building; while half tunnel vaults are employed for the side

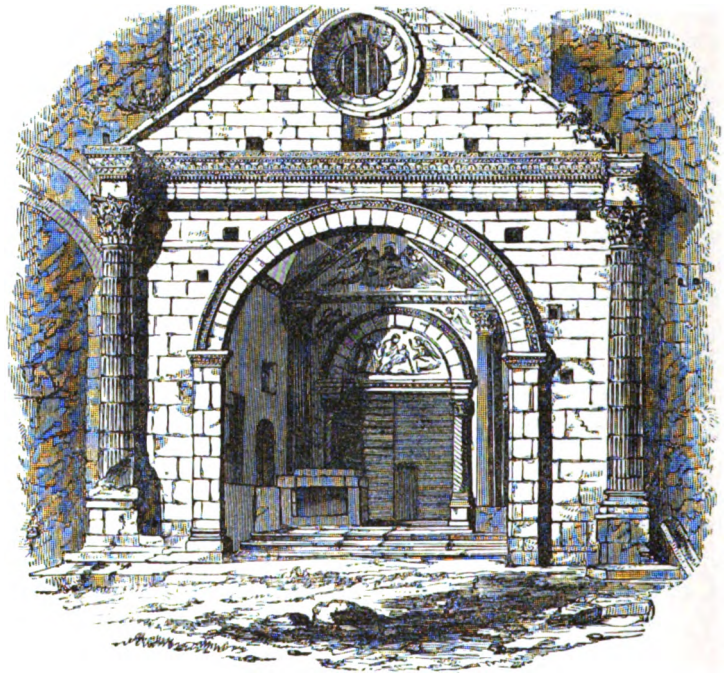


Fig. 319. Porch of Notre Dame des Doms, Avignon. (From Laborde's "Monuments de la France.")

aisles, which receive the thrust of the tunnel vaults of the nave like continuous buttresses, and push against the strong exterior walls. The ground plan of the basilica was retained through this arrangement; but an essential feature of its artistic development, the beautiful light pouring down from the upper windows in the high walls of the middle nave, was irretrievably lost. There was of course no clear story, where the nave vault was kept low between the half vaults of the aisles; and the idea of opening windows through the vault itself,

by means of lunettes, as was afterward done by means of cross-vaulting, was beyond the strength of the early builders. The column system disappeared with this construction, and was replaced by a system of heavy piers. Occasionally, galleries were carried along the side aisles, upon the vaulting, and were roofed with half-tunnel vaults. The choir, as a rule, was enlarged by a

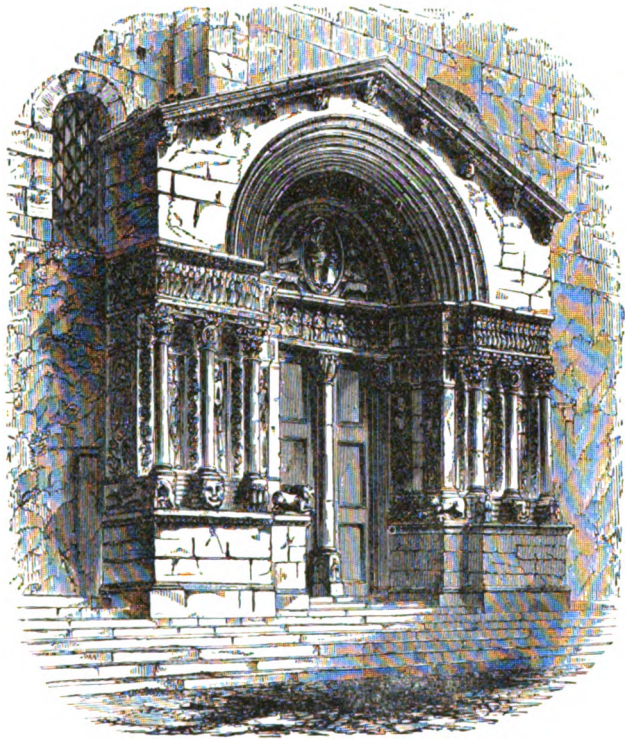


Fig. 320. Porch of St. Trophime, Arles. (From Chapuy, "Moyen Age Monumental.")

transept, and was also often further elaborated by a low surrounding aisle opening into chapels—a distinctive feature of French architecture. Columns are also employed as intermediate supports. The details of the work are generally copied from the antique, frequently with a richer treatment; the exterior receives a marked effect of height through the addition of towers to the façade or to the transept.

This style has been most consistently and nobly carried out in Provence and Dauphiné. The Cathedral of Avignon, an important example, has a highly organized plan, a cupola carried upon a curious system of parallel arches, and a beautiful porch, after the antique.

(Fig. 319). The great unfinished Church of Saint Gilles, and the

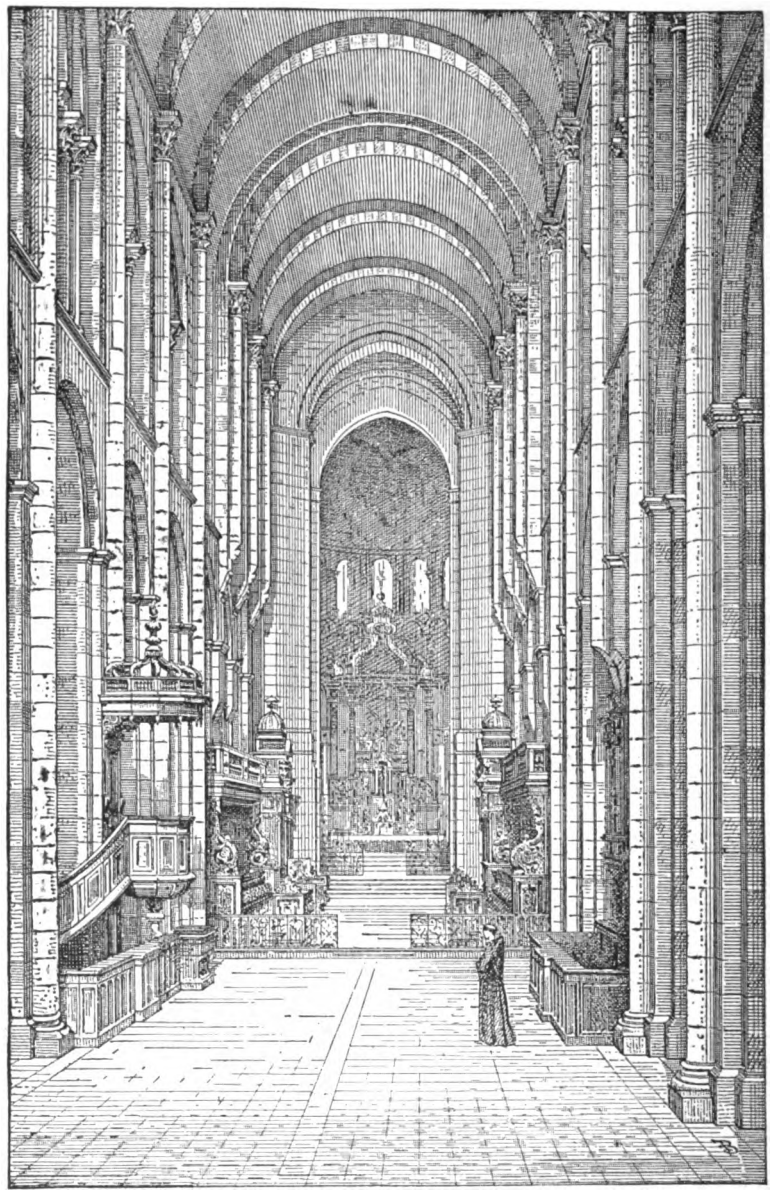


Fig. 321. S. Sernin, Toulouse.

Cathedral of S. Trophime at Arles (Fig. 320), have portals that are equally magnificent, in the same antique fashion. Here is intro-

duced a pointed form of the tunnel vault, which, from the twelfth century, disputed the sway with the round arch in this group of edifices. Farther on, we come upon one of the most magnificent illustrations of this style in the Church S. Sernin, or S. Saturnin, begun toward the end of the eleventh century, at Toulouse (Fig. 321). This is an immense five-aisled basilica, with a three-aisled transept, and with galleries carried above the side aisles, which open through columns toward the main building. A surrounding aisle and five radiating apses complete the choir; each transept terminates, besides, in an apse; so that the building contains nine recesses of this description. This glorious composition culminates in a slender tower, which rises above the transept, and emphasizes the beautiful central plan of the eastern portion of the building.

The same style prevails in Auvergne, where, however, a new element of beauty is added to the exterior decoration by the use of an ornamentation of vari-colored stones in mosaic patterns. The Church of Notre Dame du Port, at Clermont, is one of the most remarkable works of this group, and is a model in its way, with its distinct and spirited development of piers, its galleries opening out through columns, and its elaborate choir (Fig. 322).

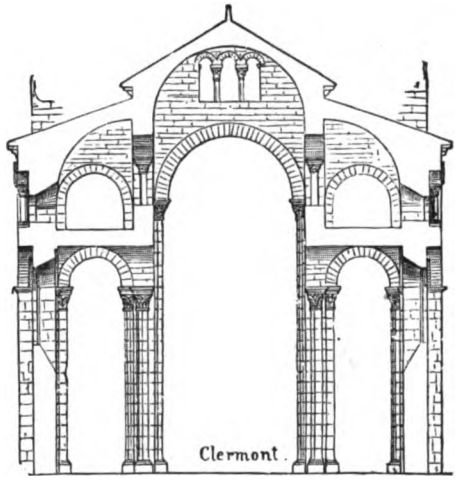


Fig. 322. Notre Dame du Port at Clermont. (Cross-Section.)

The most magnificent of the Burgundian buildings, which generally belong to this category, was the Abbey Church of Cluny, the principal church of the powerful order of Cluny, destroyed during the revolution. It was altogether one of the most remarkable of Romanesque monuments. It was in process of building from 1089 to 1131, and it splendidly manifested the power of the mighty order by which it was erected in the forms of this grandly developed style. The five-aisled main building was 410 feet long, without reckoning the narthex, or ante-church, which was 110 feet in length, corresponding to the total breadth of the church. Two transepts with ten apses extended the choir, which was completed by an aisle with five chapels. Besides the stately chief tower on the larger transept, there were six other towers; so that the exterior of the church was most imposing. The Cathedral of Autun, begun in 1132,

should be included among the works still extant, and is one of the most remarkable of the number. It has pointed tunnel vaulting, and a triforium decorated in the style of the ancient Porte d'Arroux, in the same town. Fluted pilasters are used here, and are a favorite device in many other structures of Southern France.

This same marked Romanesque style is also universally adopted in French Switzerland.* The churches of Granson on Lake Neufchâtel, and of Payerne, are examples. A curious element, however, is introduced into the elaboration of details—half baroque, half bar-

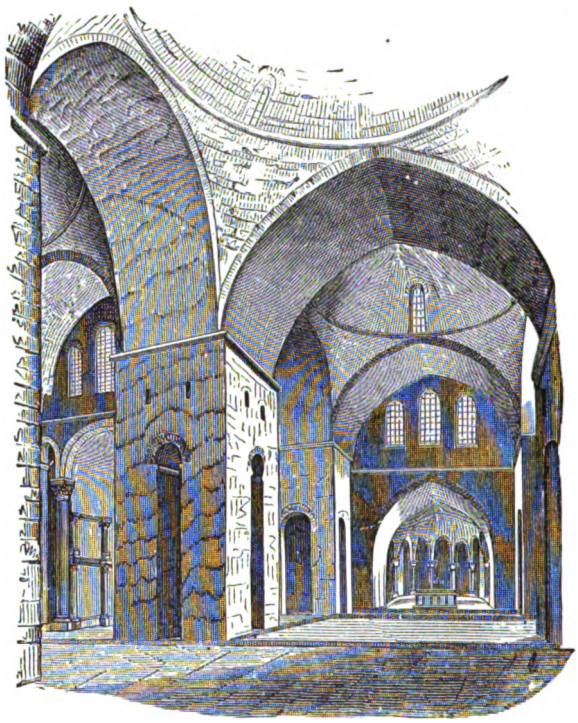


Fig. 323. S. Front, at Périgueux.

baric, in its fantastic characteristics—of which the Church of Notre Dame de Valère at Sion is a conspicuous example.

The western provinces of France exhibit a group of edifices, the common feature of which is a dome, in the Byzantine style, although

* Blavignac, "Histoire de l'Architecture sacrée," etc. Also the contributions of J. R. Rahn to the "Transactions of the Antiquarian Society of Zurich," and the same author's "Geschichte der bildenden Künste in der Schweiz."

they adhere, at the same time, to other forms used in the south. These domes are raised on pendentives, above a molded cornice, in the antique style; in which respect they differ from those Romanesque domes which have already been treated of. This form is generally associated with a main building which has no transept, and which is divided by piers at wide intervals. The side walls are enlivened by blind arcades with colonnettes, and broken up, in the upper spaces, by windows with round arches; as a rule, the transverse arches are pointed. The Cathedrals of Cahors and of Angoulême are after this pattern. But the Church of S. Front, at Périgueux,* is the most remarkable building of this group, because the dome style is united with a ground plan which is not only in arrangement, but also in proportions, the exact imitation of S. Marco in Venice (Fig. 323), with the difference that the piers are more massive, the columns and upper galleries are wanting, the spanning-arches are pointed, and the whole interior, owing to a poverty of ornamentation, appears bald and bare. Besides all this, the great vestibule is altogether omitted, the remains of an older structure taking its place. The existing church appears to have been erected after a fire, which occurred in 1120. The church has undergone a ruinous reconstruction, but De Verneilh's book, cited above gives valuable plates of it before the restoration.

The last important group of French architectural productions which we have to consider belongs to the North, and especially to Normandy.† The hardy, bold Norman race, which planted itself firmly in this region of France in the beginning of the tenth century, knew how to impress upon its monuments the stamp of a severe regularity, a simple, distinct fundamental design, and consistent execution. When their wealth increased, and their national importance rose, after the conquest of England in 1066, the monuments of the Normans shared also in the improvements occasioned by these advantages; and henceforth we find the vaulted structure in the striking form of the cross-vault in combination with the basilica plan. At the same time, after the fashion of the Saxon churches, two boldly springing towers are connected with the structure of the façade, with the further addition, as a rule, of a massive square tower to the crossing. The ornamentation is simple and uninteresting, inclining to a playing with lines rather than to the employment of vegetable forms, and showing a special predilection for the meander, the rhomboid, the zigzag, and the checker pattern. In the latter epochs

* F. de Verneilh, "L'Architecture byzantine en France."

† H. Gally Knight, "Architectural Tour in Normandy." Britton and Pugin, "Architectural Antiquities of Normandy." See also the work of Ruprich-Robert cited above.

this style of decoration is often brilliantly effective, covering large surfaces on the doors, the arcades, and the walls of the clear story.

The two chief monuments of this architectural style are the monastic Churches at Caen of La Trinité and of S. Étienne (abbaye aux hommes), founded by William the Conqueror and his queen, both of which are complete exemplifications of the development of the vaulted

Fig. 324. St. Étienne. Caen.

basilica with piers. La Trinité, originally founded in 1064, but possibly not having been perfected in its present form before the twelfth century, is a basilica vaulted throughout, its plan of three aisles being continued beyond the transept into the choir. Distinct

and regular as is the development offered by this design, it yet rejects the more opulent and ornamental chapel arrangement of the Southern school. The clear story above the arcades is enlivened by a gallery, along which occur windows connected likewise by rows of columns. The great cross-vaults of the main nave are sexpartite, while arch supports spring likewise from the intermediate piers. The same style, after a severer type, appears also in the Church of S. Étienne, built 1066-77, but completed at a somewhat later date. The arrangement of the ground plan is similar; but the choir was subsequently replaced by an early Gothic renovation. The vaultings of the main nave are sexpartite, possibly not following the original intention. A gallery is carried above the side aisles, opening toward the main space with wide arcades. The upper windows are connected by special galleries in this case also. The exterior is adorned in a stately fashion by a low tower above the transept, and two slender towers on the façade, the upper parts of which are very delicately proportioned (Fig. 324). The division of the façade by buttresses is simple but comprehensive, and in harmony with the interior development. Three portals at this point serve as means of ingress.

ENGLAND.

With the conquest of England by Duke William, the Norman style began to predominate to the exclusion of the old Saxon mode of architecture. The new architecture of the country adopted, however, certain elements of the earlier epoch into its system, thereby acquiring a quite special national coloring. The use of wood in building, popular as it had been among the island folk of a former day, was undoubtedly the most important of these elements, and henceforth came into play in the flat roofing of the basilica naves. This national predilection was so strong, that the main buildings of the churches were invariably roofed with wood; so that not a single vaulted middle nave is known in the whole range of English architecture of this period. A comparison of the vaulted design of the basilica, so decidedly developed in Normandy, sharpens the contrast offered by the Anglo-Norman architecture, notwithstanding that all other parts of the building harmonize exactly with the Norman system, even to the point of seeming to require the vaulted roof. Next in order we notice the extremely massive piers of the nave, which, however, abandoning the Romanesque practice of all other lands, are cylindrical like very heavy columns, or else are associated with

pilasters, colonnettes or other adjuncts, so as to form clustered piers, though always on a circular foundation. The customary forms do not suffice in the management of capitals and bases for these unwieldly masses. Therefore, as a rule, a simple beveling was adopted for the base; while a modification of the cubiform capital, adapted to the new proportions, as shown in Fig. 325, composed the so-called "pleated" capital. Galleries were disposed above the vaulted side aisles, and frequently, also, on the east side of the transept, opening with broad arcades toward the middle nave. Then follow the windows, in front of which are passageways, with galleries raised on pillars,

Fig. 325. From the Church at Waltham.

similar to those in the churches of Caen. Along the whole clear story powerful pilasters rise upward, as though an upper vaulting, which nowhere occurs, were in contemplation. The linear decoration, already observed in Normandy, comes into extended use here for ornamentation; so that, especially in the intrados of the arcades, in the framework of the galleries, and, most of all, on the portals, all such rich though lifeless forms as the rhomboid, scale-like decorations, and particularly the zigzag, are employed. A massive quadrangular tower was nearly always built above the transept; while the façade, as a rule, was furnished with two towers. The portals, con-

trary to the usual rule, have round-arched doorways; so that the tympanum, which in other cases is found between the horizontal beam thrown over the door and the arch (Figs. 301, 317, and page 420), was here abandoned. An opportunity was thus lost for the display of sculptured decoration; decoration now, for the most part, is almost exclusively confined to the linear ornamentation mentioned above. So, in their grave and massive strength, bold in structure, with strongly defined horizontal proportions, the monuments of Anglo-Norman art have come down to us; yet they are

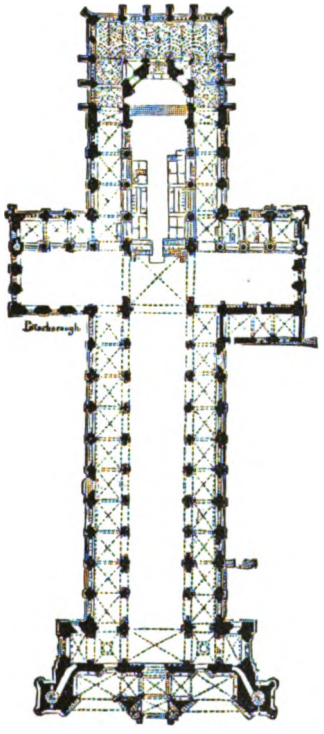


Fig. 326. Ground-Plan.

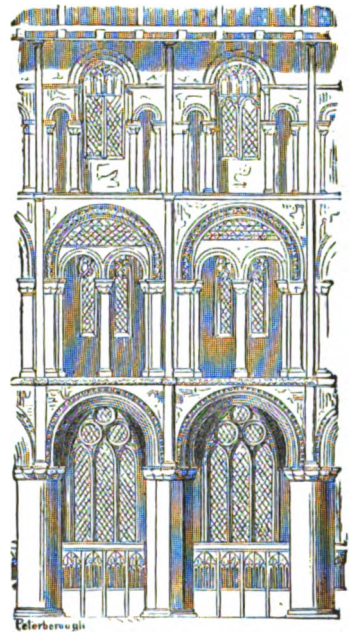


Fig. 327. Section.

Cathedral of Peterborough.

wanting in all the elements of a more refined, a nobler, and a more pliant life. They inspire one less with a sense of ecclesiastical dignity and solemnity than with a feeling of warlike defiance, or even of knightly splendor.

Among the numerous edifices of the country, there are important buildings, and parts of buildings, of this epoch, most of them, however, transformed during the Gothic period, or changed by restora-

tions. A notable memorial of this early period may be found in the Cathedral of Winchester, built from 1079 to 1093, containing remarkable crypts and an extensive nave, afterward variously restored and remodeled. There are mighty crypts of this period under the Cathedrals of Worcester and Canterbury; and the choir and crypts of the Cathedral at Gloucester—founded 1089, which has an elongated main building of the form developed in the twelfth century —belong to the same time. The Cathedral of Norwich, which, in common with the rest of these structures, starts with an unusually grand conception in the original plans, and especially is most remarkable for its length—a point peculiar to all English structures—is also to be ascribed to this advanced epoch. The building extends to a length of 411 feet, with a main nave 31 feet in width, broken by an extended transept, with apses at the east end, screened off from a choir with a low passage gallery and two chapels of original plan. The Cathedral of Peterborough (Figs. 326, 327), is not less imposing in appearance, the building of its interior not having been really finished till toward the end of the twelfth century. Its elongated ground plan; the transept, with its eastern side nave; the beautifully constructed openings of the upper galleries above the side spaces; finally, the sustained clearness of the whole system of parts—afford a characteristic example of the development of the Anglo-Norman style. The choir arcade was altered afterward; and the façade, too, was enriched by an imposing Gothic vestibule. Most of the cathedrals contain remains of more or less importance in the matter of execution and treatment.

SCANDINAVIA.

In the Scandinavian kingdoms, where the universal dominion of Christianity is of a comparatively recent date, an architectural type was developed, wherein English influences preponderated in Norway; while in Sweden and Denmark everything points back to the influx of German ideas, associated in isolated cases with a suggestion of the French schools, produced by the combination of different architectural tendencies.

In Denmark,* where Christianity was introduced under Knut the Great (1014-1036), and an impulse toward higher culture given under Waldemar I. (1157-1181), the Romanesque style pursued its unique development from the middle of the tenth far into the latter part of the thirteenth century. It is worthy of remark that the

* Compare J. Lange, in the Danish edition of the present work; Copenhagen, 1872.

Winchester Cathedral in the south of England, seen from the northwest. The long stretch of building in the foreground is the nave, which is Gothic of the thirteenth and fourteenth centuries. The low, square tower rising above the roof, is built over the crossing of the transept with the nave and choir and this, as well as the lower part of the transept on the left, is Romanesque of the twelfth century. The long choir, not seen in the picture, is also Romanesque and is of great beauty.

WINCHESTER CATHEDRAL

influence of Rhenish monuments is apparent in the case of several important structures, as in the Cathedral at Ribe (Ripen) in Jutland, in the building of which, indeed, sandstone from Andernach was used. Its forms indicate so clearly the predominance of the perfected Romanesque architecture of the Rhineland, that the structure must, perforce, belong to a period prior to the restoration effected after a fire in 1176, the first foundation having been laid in 1134. The blind arcades of the choir apse; the wide transept, with its mighty span of cross-vaulting in the wings, with a dome above the intersection of the arms of the cross, and piers, combined with smaller column shafts; finally, the galleries above the side aisles—all clearly indicate Rhenish influences (Fig. 328). The same galleries may be

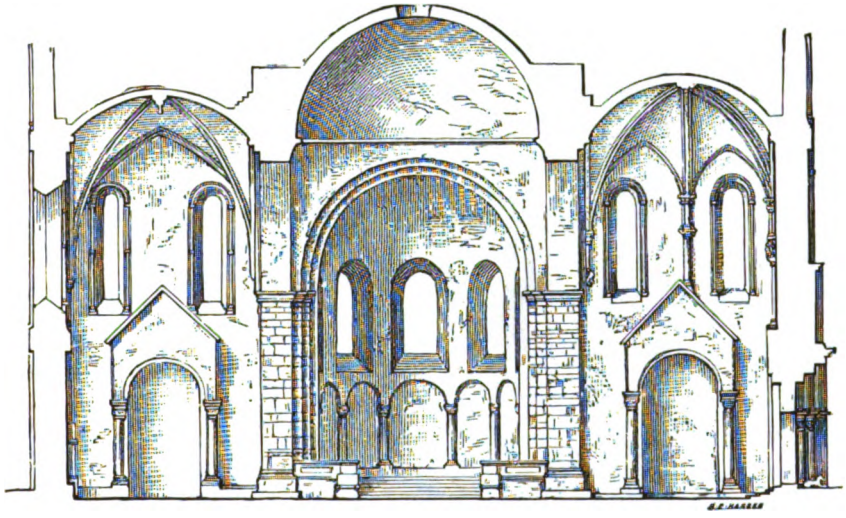


Fig. 328. Cathedral at Ribe. (Cross-Section.)

observed at the Cathedral of Viborg, which also has a crypt (Fig. 329) that may be assigned to the time of its first foundation in 1133, with their robust columns, plain cubiform capitals, and vigorously handled bases; while the upper part of the building, especially the choir with its two sentinel towers, appertains to a later development of the same order. Two additional towers on the west façade lend a rich picturesqueness of effect to the exterior. The length of the whole amounts to about 207 feet, almost corresponding with the structure previously described. The Cathedral of Roeskild is of more importance—an imposing structure, measuring 265 feet in length within, with an aisle surrounding the circular choir in the French style, strongly projecting transepts, a three-aisled nave with

upper galleries, and a remarkable pair of towers on the western façade. While the windows and doors, as well as the triple groups of windows in the gallery story, still exhibit the circular arch, the arches of the arcades and vaultings are pointed throughout; and well-defined buttresses are added to the exterior of the side aisles, as shown especially in the Norman buildings; so that the building is already semi-Gothic in character.

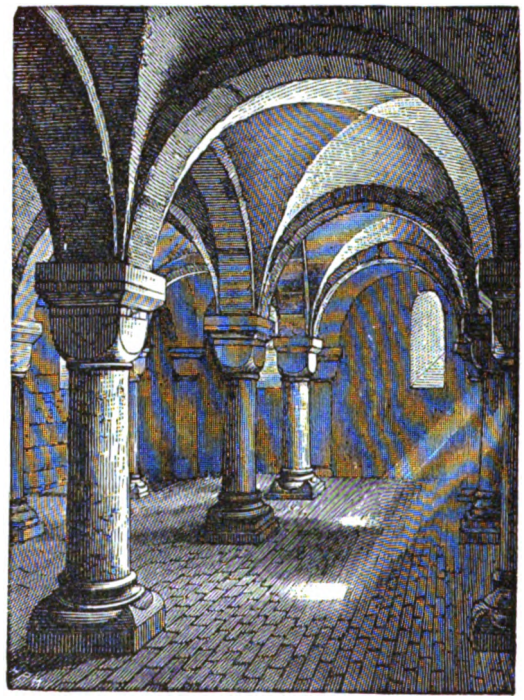


Fig. 329. Crypt of the Cathedral at Viborg.

In the island of Seeland especially, side by side with buildings of hewn stone, an imitation of the North German brick churches came into vogue; as, for instance, the Cistercian Church of Soroe, founded in 1161, which follows very closely the Church at Loccum (p. 432) both in ground-plan and construction, both choirs being rectilinear, and chapels in the transepts. These buildings, as well as the Monastery Church at Ringsted (1170), were originally basilicas with low-pitched roofs, which afterward were vaulted over. The Church of Kallundborg is a centralized building in the shape of a Greek cross, with arms ending in polygons. A massive square tower

formerly rose from the intersection, producing a wonderfully picturesque effect in combination with the four octagonal towers, one at the end of each arm of the cross. The Monastic Church of Westerwig in Jutland (1197) exhibits the alternation of piers and columns, so frequent in North Germany. The Monastic Church of Weng and the Church at Salling are regular basilicas. A great number of circular churches of smaller size may be found in different parts of the country. There are four on the Island of Bornholm, and three in Greenland, at Igalikko and at Kakortok.

Little round churches of similar construction are often met with in Sweden* as well; for instance, at Hagby, at Solna near Stockholm, at Munsoe, etc. Besides these, there occurs a special type of small village churches which often have a high choir, a west tower, and a low nave between the two whence the popular name "pack-saddle" churches. The Church at Föra on the island of Oeland, and several others, are specimens of this class of buildings. A more developed style was introduced here also by the influence of foreign schools of architecture; the English taste predominating in West Gothland, the North German in East Gothland, these being the mainland provinces: the island of Gothland is named below. Occasionally French touches are not wanting, particularly in the development of the choir with surrounding aisles. The country furnishes admirable limestone and sandstone for building material, the fashion of building in brick being a later North German innovation. The Church of Husaby belongs to the earliest and simplest of these structures. The Cathedral at Skara exhibits more richness of design and construction; but these are particularly noticeable in the Cistercian conventual Church at Warnhem—a building of the transition period, with a semicircular choir and surrounding aisle, and betraying English influences here and there, especially in the north gate. The Cathedral of Linköping in East Gothland is a notable structure of the transition period; the choir, indeed, with the surrounding aisle, of equal height, belonging to the Gothic age. In consideration of its magnificence of ornamentation and uncommon proportions—its total length being 329 feet—we may assign this building to a most important place among the edifices of the North. Simple churches belonging to the Cistercian order may be seen at Alvastra, having a ground-plan reminding one of Loccum, roofed with circular arches in nave and choir; and there are others as at Vreta, as well as at Nydala in Smaland. The Cathedral at Lund in the far South, and just opposite Copenhagen, a stately vaulted basilica with piers 225 feet

* Compare the appendix to the Swedish edition of the present work, by C. Eichhorn; Stockholm.

long, is the most considerable monument in Sweden, the southern portion of which formed a part of the realm of Denmark at that period. Though the completion of its crypts has been assigned to about 1130, and the choir to 1145, the elegance of its finish, which is analogous to that of the perfected Rhenish structures, seems to put so early a date out of the question. The exterior of the choir especially (Fig. 330), with its blind arcades and its gallery of diminutive columns, indicates a more advanced epoch. The two west towers also participate in a greater richness of construction. In the interior, German influences betray themselves unmistakably in the alternation of massive lighter piers, as well as in the arrange-

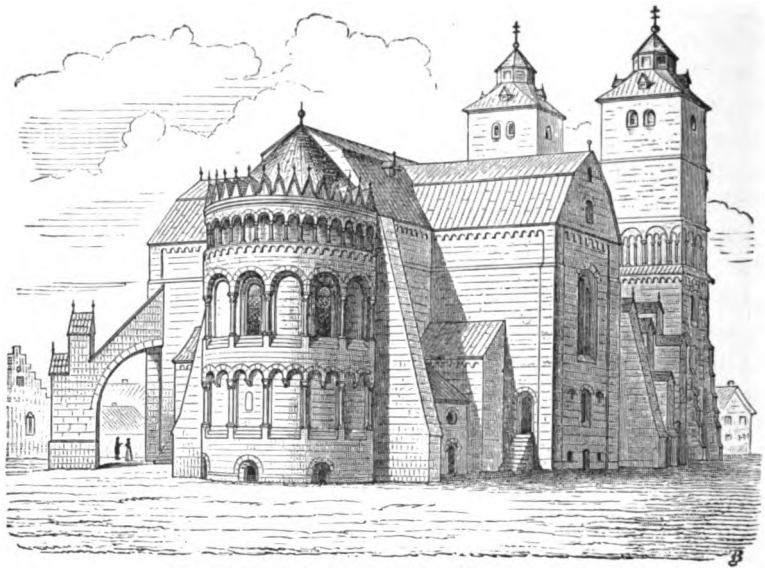


Fig. 330. The Cathedral at Lund.

ment of the clear story with mock arcades. A crypt extends beneath the choir; and there is also an arrangement of smaller chapels opening upon the broadly projecting transept. The ruined churches at Sigtuna near Lake Mälar, north of Stockholm, are specimens of the Romanesque style in its various stages of development. St. Peter's, for instance, has a heavy square tower, after the English fashion, at the intersection of the arms of the cross; in other respects it is a simple cruciform building with a single nave. St. Olaf is a basilica with three naves. St. Mary's Church, of the Dominican order, is an example of the transition to the Gothic. The North German brick structure comes in with the transition period; but it

uses cut stone for detail work, as in the case of the Cathedral at Westeräs, that at Strengnäs with round and square piers alternating in the nave, the Conventual Church at Sko, etc. Finnland, with its almost unknown edifices, should not be omitted here, especially the Cathedral at Abo, a massive brick building of the late Romanesque period.

A very high degree of development is shown in the buildings on the Island of Gothland. Early converted to Christianity, conspicuous in commerce and trade by reason of the fertility of its soil and its favored position, and yielding admirable building material in limestone and sandstone, the island brought its architecture, under North German influences, to a high state of excellence. The extensive and picturesque ruins of the once rich and powerful town of Wisby are preëminent examples of this. The city wall, with its thirty-eight towers, still bears witness to the former importance of the place, which has been called the Venice of the North. Among its eighteen churches, most of them lying in ruins, we may mention the Cathedral of St. Mary, a late Romanesque hall church, the choir square at the end like those in most of the churches of the town, and furnished with two smaller towers near the choir, besides the west towers. Further, there is the Cruciform Church of St. Lars, with a triforium, an arrangement seldom occurring here. But chief among them all is the Church of the Holy Spirit, a particularly remarkable structure, of octagonal ground plan, with a square central space, and especially notable as an example of the completely developed double chapel. It is of the very latest Romanesque style, contemporaneous with the perfected Gothic of France. Other structures on the island betray a predilection for the two-naved plan; as, for instance, the Church of Gothem, and the richly finished building at Tingstäde. In places where the towers have been preserved in their original form, they again indicate, in their massive design and simple treatment, the influence of the North German buildings, as in the Church at Walls.

Finally, Norway is most clearly under the influence of her neighbor England in the plan of her stone structures. An especially striking feature is the clumsy, circular pier, with a diminished cubiform capital, evidently borrowed from that country, such as may be seen in the Church at Aker, near Christiana—a simple cruciform building, in which the square space at the intersection, as in many Swedish churches, is shut off by heavy walls, only pierced by narrow passageways. A similar church is that of Ringsaker, with a tunnel vault in the main nave; while the side aisles, after the fashion of the south of France, are roofed with half-tunnel vaulting. The Cathedral of Stavanger, on the other hand, rebuilt after a fire in 1272, is a

basilica with heavy circular piers, and zigzag ornaments on the arcades, in the Anglo-Norman manner; while the lighter proportions of the piers and the sharply ascending cross vaulting of S. Mary's Church at Bergen exhibit the predominating influence of German prototypes. The first rank among Norwegian edifices must, however, be assigned to the Cathedral at Drontheim, though only the transept belongs to this epoch. Its design, with upper galleries and a triforium, recalls throughout the Anglo-Norman order of architecture; nor do the details of the building depart from that type.

More important and unique of its kind is another class of build-

Fig. 331. Church at Borgund.

ings, peculiar to the mountainous interior of Norway, which adapt the scheme of the Romanesque style to a highly original development of architecture in wood. The churches are erected either after the model of log-houses, with beams in horizontal layers, or else with upright planks (the so-called slab-built buildings). The ground-plan bears some analogy to the basilica plan, but with essential variations, consisting in the fact that the form of the nave, as a whole, approaches to a square, and that the lofty central space is encircled by low aisles. The division is effected by round wooden pillars with

cubiform capitals, from which spring arches, likewise of wood. The ceiling is formed by the rafters of the roof, wherever modern innovation has not substituted an imitation of tunnel vaulting. The choir, finished with an apse, is situated at the east, but appears separated from the main building by the aisle that surrounds the nave. The whole building is usually surrounded by a covered passageway, opening, like a gallery, between small wooden pillars.

The exterior is still more characteristic than the interior (Fig. 331). The various parts rising one above the other, with their high roofs, culminate most picturesquely; their pyramidal form reaching its climax in the tower, which crowns the roof of the lofty main nave. Usually a separate little steeple springs from the choir; while a bell-tower, with obliquely sloping walls, often stands apart from the church. There are very few and very small windows; the churches in winter being shut up against the cold, and lighted by lamps.

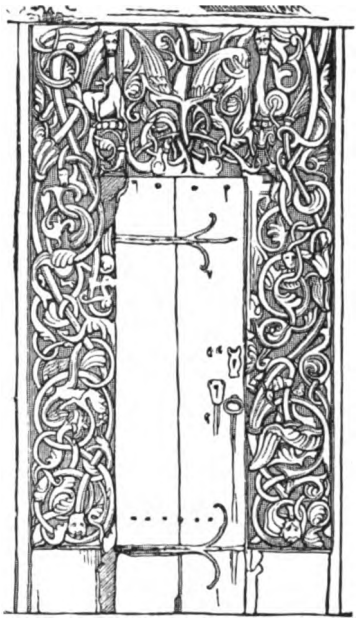


Fig. 332. Door of the Church at Tind.

In decoration on the capitals and on the doors a curious sort of carving is made use of, in which Northern imagination finds vigorous play in the intricate scroll-work, with dragons, snakes, and all manner of animal shapes, often recalling the chirographic flourishes of the missals by its spiral mazes. The Church of Tind, dating from the close of the twelfth century (Fig. 332), has a particularly rich door-frame of this description. Besides this building, the churches of Borgund, Hitterdal, Urnes, and others are particularly effective and suggestive examples of this original modification of the Romanesque type, even in the remote North.

SPAIN.

The diffusion of the Romanesque style of architecture in that opposite and most remote region of Western civilization, the Pyrenean peninsula, as far as a still incomplete knowledge will render a survey

possible, need not detain us long.* From the time that the Christian power in Spain began slowly to win back the domain conquered by the Arabs, a style gradually unfolded itself in those far provinces, corresponding in its fundamental features with the universal tradition of the West. In the earlier epoch of the eleventh and twelfth centuries an influence determining future development seems to have been chiefly exercised by the architcture of the south of France, with its tunnel-vaulted naves; a fact sufficiently accounted for by the contiguous position of the provinces of the Northern part of the peninsula, then altogether under Christian rule; hence, also, the reason of the preponderating emphasis given to the pillared structure with its resulting organization. Columned basilicas appear to have been of rare occurrence. Commonly a huge tower springs from the transept, and the façade is also often finished with towers.

But the farther the Christians forced their way toward the south, and the more vehemently they strove with the Moors for the possession of the country, the more decidedly was their own architecture modified, if not subjugated, by the methods of their opponents. The points of contact of the two civilizations, so closely crowding one upon the other, were too manifold, in peace as in war. The Moorish monuments which filled the reconquered provinces were too splendid, and too fascinating in the gorgeousness of their ornamentation, not to exert a radical influence over the susceptible imagination of the Spaniards. Indeed, since the rest of Europe had not been able to resist these influences of Mohammedan art, how much easier must

*Don G. P. de Villa-Amil y Don P. de la Escosura, "España Artistica y Monumental;" Paris, 1842. Caveda, "Ensayo Historico," etc. See note, p. 424. A. de Laborde, "Voyage pittoresque en Espagne;" 2d ed., 4 vols., Paris, 1807-20. "Monumentos arquitectónicos di España." G. E. Street, "Some Account of Gothic Architecture in Spain;" 2d ed., London, 1869. Uhde, Constantine, "Baudenkmäler in Spanien und Portugal," Berlin, 1889. Gurlitt and Junghändel, "Die Baukunst Spaniens," Dresden. (These two books contain photo plates.) Prentice, A. N., "Renaissance Architecture and Ornament in Spain." London, .
[It may be useful to quote here what Mr. Street says about the writers on the architecture of Spain: "Unfortunately, so far as I have been able to learn, no one of late years has taken up the subject of the mediæval antiquities of Spain in the way in which we are accustomed to see them treated by writers on the subject elsewhere in Europe. The "Ensayo Historico" of D. José Caveda is very slight and unsatisfactory, and not to be depended on. Passavant, who has published some notes on Spanish architecture ("Die christliche Kunst in Spanien;" Leipzig, 1853), is so ludicrously wrong in most of his statements, that it seems probable he trusted to his internal consciousness instead of to personal inspection for his facts. The work of Don G. P. de Villa-Amil is very showy and very untrustworthy; and that of Don F. J. Parcerisa ("Recuerdos y Bellezas di España;" 1844), and the great work which the Spanish Government is publishing ("Monumentos arquitectónicos di España;" Madrid, 1859-65, and still in course of publication), are both so large and elaborate as to be useless for the purpose of giving such a general and comprehensive idea of the features of Gothic architecture in Spain as it has been my effort to give in this work."—*Some Account,* etc. Preface, pp. vi., vii.]

have been its conquest here, where all the land was thickly sown with its monuments! Thus, in this closing period, a Romanesque style was developed, holding fast in its fundamental laws to the old tradition, adopting in its structures the now almost universal cross-vaulting,

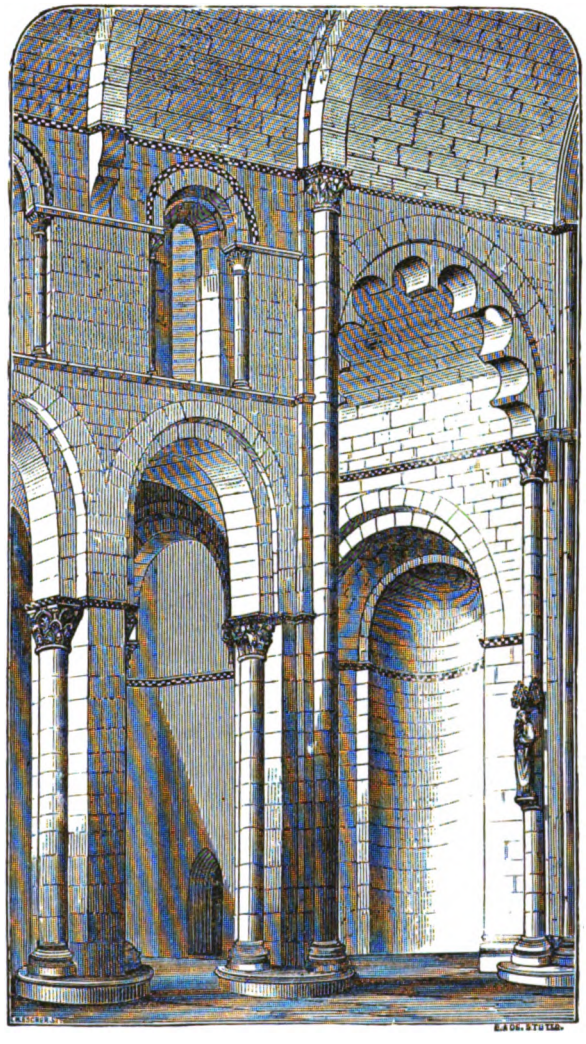


Fig. 333. Church of St. Isidoro. Leon.

but admitting in its ornamentation the brilliant and lively play of Moorish details. Many superb edifices furnish examples of this interesting combination.

Perhaps the most noted production of the early Romanesque period in Spain is the Cathedral of Santiago de Compostella—a considerable structure, with tunnel-vaulted main nave, a three-aisled transept, galleries over the side aisles, a choir with a surrounding aisle and a ring of chapels, and, in addition, a superb porch; all the important parts of the building belonging to the twelfth century, and in exact imitation of S. Sernin at Toulouse. The Church of S. Isidoro

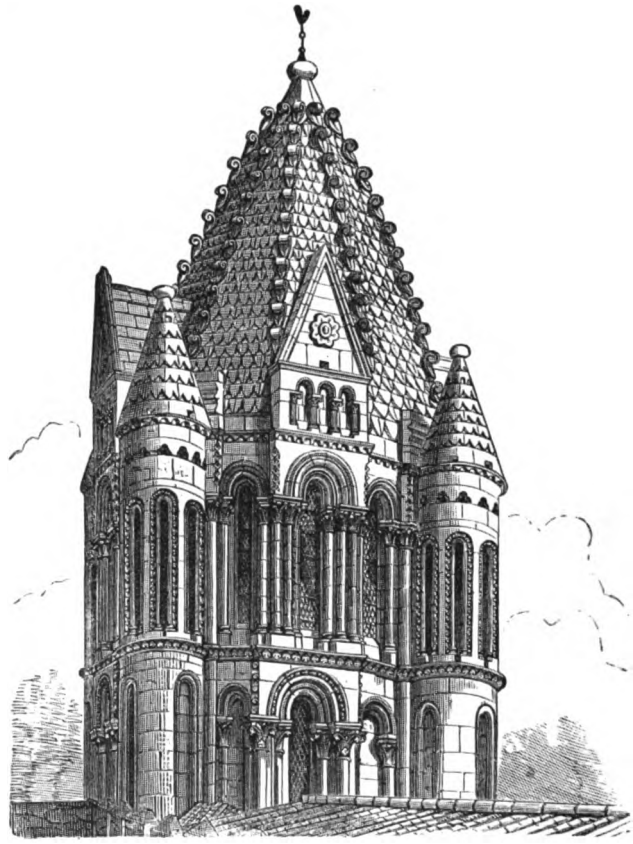


Fig. 334. Tower of the Cathedral of Salamanca.

at Leon belongs to about the same period, and resembles the former in conception. It was consecrated in 1149, and is a pillared structure of rich proportions, and vigorous plastic decoration (Fig. 333). The vaulted "panteon," the ancient mortuary chapel of the kings of Leon, is connected with it on the west side. In Segovia, several churches, especially that of St. Millan,* exhibit the original design of elegant

* For a view of this church, showing the singular arrangement of cloisters along the side aisles, see Street, the work cited above.

The cathedral at Pisa in Tuscany, seen from the east end, and in the foreground the Campanile or bell-tower, commonly called the Leaning Tower of Pisa. The buildings are all of that Italian Romanesque which reached great perfection in the twelfth century. The bell-tower was begun in 1174 *and the design is of this period. All the buildings show many of those curious irregularities of structure to which attention has been called recently, such as curves where straight lines were supposed to exist, overhanging walls, and the like. It is now thought that even the slope of the tower is at least partly intentional, though the foundation may have sunk, increasing the irregularity.*

PISA

THE CAMPANILE (LEANING TOWER) AND CATHEDRAL

columned arcades forming porches along the exterior of the side aisles, sometimes by a similar colonnade at the west end. (The Church at Monreale, in Sicily, has just such a portico on its north side.) The old Cathedral of Salamanca—a building with massive piers, and a dome above the transept—belongs to the later period of full and perfect development (Fig. 334). Its choir consists of three parallel apses—a form common among Spanish buildings, which almost did away with the richer plan of the French choir, with its surrounding aisle, and series of chapels. Besides these, the Cathedral and Church of S. Magdalen at Zamora, both remarkable for superb gates, belong to this epoch. There is a monastery church of the same era in the neighboring town of Toro—an admirable example of original adaptation of Moorish forms, with its massive domed tower above the transept. Round, jutting turrets rise at the corners, gracefully perforated, like the great central tower, by two rows of arched window apertures. The flat roofing intensifies the singularly massive effect of the whole structure, which is profusely ornamented in Moorish fashion. By way of contrast, another conspicuous building of the latter part of this epoch, the Cathedral of Tarragona, in the richness of development of its pillar and vault construction, exhibits the influence of the Northern style; it may be, even of the Norman. The Cathedral of Tudela and that of Lerida, now used for secular purposes, are of lesser dimensions, but similar in plan; while, on the other hand, the Abbey Church of Veruela, with its richly developed choir, shows itself akin to the French buildings of the period. Finally, there are still some cloisters remaining as striking specimens of the magnificence of the closing epoch, among others those of San Pablo at Barcelona, which again incline to the Moorish manner, with their elegantly decorated coupled columns and scalloped arches.

ITALY.*

While in the North, the basilica plan was followed almost universally, and went through a natural evolution, in Italy a very marked divergence distinguishes the several groups. We find a most decided adoption of the ancient Christian basilica, side by side with an equally positive leaning to Byzantine models. Side by side with works in which the antique style is delicately wrought out, we come upon one allied to the German character in its brighter fancies. Besides a

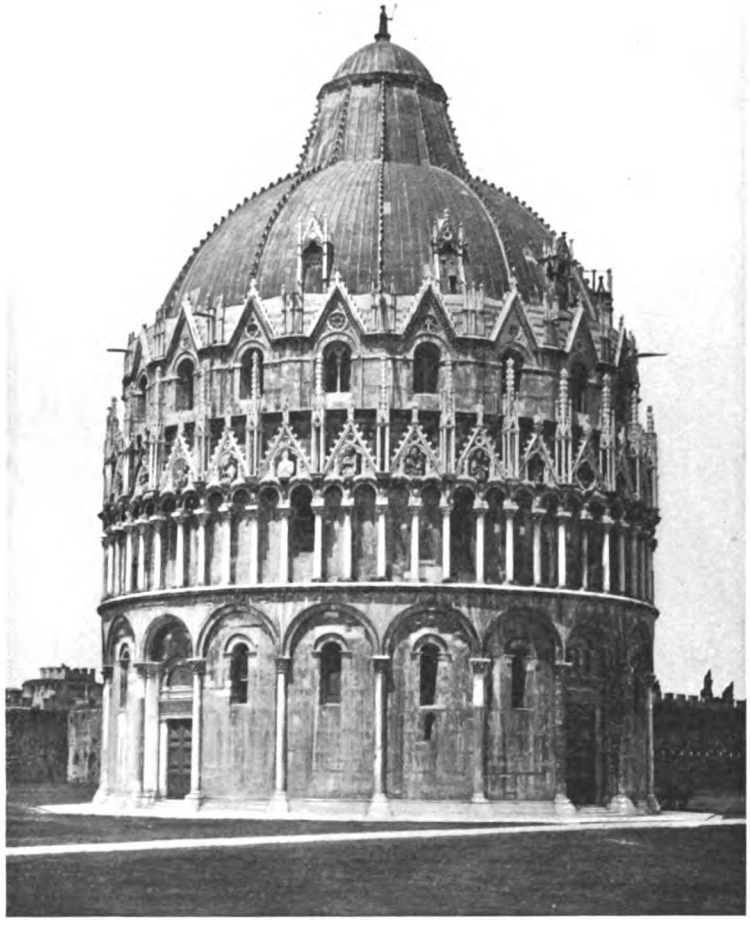
* Cattaneo, R., "L'Architettura in Italia" (translated into English as "Architecture in Italy," etc.). Rohault de Fleury, "Les monuments de Pise au Moyen Age"; "La Toscane au Moyen Age." Ongania (publisher), "San Marco in Venezia" (an immense folio work).

clearly defined vaulted building, we even chance upon a suggestion of the capricious richness and grace of Mohammedan architecture. With few exceptions, Italian architecture separates the tower from the church building, and gives it an independent position. Almost as commonly a cupola is raised above the crossing. Although the exterior does not attain to that high degree of richness of proportion as in the architecture of the North, on the other hand the lavish employment of costly materials results in an extraordinarily beautiful style of ornament, which takes the form of a graceful system of surface decoration. Even where bricks are used almost as the only material, a degree of beauty and delicacy of detail is produced with them that is unknown and unattained in the North. The treatment of the interior seeks to preserve broad, open spaces; a fact which generally prevents the attainment of great height.

The buildings of Rome far into the thirteenth century exhibit an absolute, unshaken adherence to the style of the ancient Christian basilica, without even a suggestion of further development. Ancient monuments were stripped, right and left, and the columns and architrave of the basilica were constructed out of the spoils. The proportions of the buildings were reduced, and the height increased as the breadth diminished. San Martino ai Monti dates from the ninth century, with its primitive crypt. Its nave has been restored throughout, but is still of fine, elegant proportions; the central nave being 40 feet wide, with an architrave above the columns. Then there is the magnificent, five-aisled Church of San Giovanni in Laterano, and the stately Church of Santa Maria in Aracœli, on the hill of the Capitol. San Crisogono and Santa Maria in Trastevere belong to the twelfth century, both with architraves surmounted by exquisite console cornices; also the front portions of San Lorenzo fuori le Mura, likewise with horizontal entablature, and with columns differing greatly in their proportions. The Church of SS. Vincenzo and Anastasio, outside the city, beyond St. Paolo, is a rude pier structure. But more interesting than these echoes of a bygone period, without any intrinsic individuality, are some of the graceful bell-towers of that age, which, simply built up in square towers with low-pitched roofs, are in the highest degree picturesque. The most attractive of these are the towers of Santa Pudenziana and of Santa Maria in Cosmedin.

Although architecture in general made little progress here, a particular branch of decorative art arose, the chief attraction of which consisted of tastefully harmonizing those bits of bright-colored marble, of which the soil of ancient Rome possessed an inexhaustible supply. A fantastic, grotesque element is perceivable in the yielding of the sterner architectural forms to an unrestrained play of fancy.

Baptistry of Pisa. This building stands opposite the west front of the cathedral seen in the previous plate. The round part of the cupola is new, for originally the central tower-like nave rose high above the aisle which surrounds it like a ring. The round arches are of the original design (1153), *but the sharp gables and the dormers in the roof are of fourteenth century Gothic design.*



PISA
THE BAPTISTERY OF THE CATHEDRAL

The shafts of the columns are heavily ribbed, and assume spiral forms, and, as early as the twelfth century, are decorated with patterns in mosaic of the gayest description. We discover similar characteristics, upon a larger scale, in the columned arcades of the cloisters of San Giovanni in Laterano and San Paolo fuori le Mura, where this style is exhibited in exceptional richness of execution.

Church architecture in Tuscany took a freer and more independent direction; having its origin likewise in the wooden roofed basilica, but developing consistently, down to its smallest details, rigidly, according to antique models. The execution of the work was in costly material, as carefully dressed stone, or else it was adorned with rare varieties of marble. The first magnificent work of this kind is the Duomo of Pisa, begun in 1036, after a naval victory over the Sicilians by this commercial city, then rapidly coming into prominence. Busketus and Reinaldus are mentioned as the architects. It is a five-aisled, wooden roofed basilica, intersected by an extended three-aisled transept, of which the middle spaces end in apses, while a dome crowns the intersection of the transept and the nave. Galleries above the side aisles open with pillars and columns toward the high central nave, and are continued on the side of the crossing (the intersection of nave and transept) as far as the beginning of the choir. The arcades of the naves are supported upon sixty-eight slender granite columns with antique marble capitals. The details are, in feeling, classical. The main body of the building, both internally and externally, is built with alternate layers of white and dark green marble. The exterior presents a rich massing of columns and half-columns with arcades. The spandrels of the arches are chiefly decorated with graceful designs in gay mosaic patterns, and with fine ornaments modeled on the antique; the capitals are carefully copied from Corinthian models. The lower part of the façade is divided by engaged columns with arches. Above these, however, are four rows of open arcades, full columns with arches, which are extended across the surface of the wall in the form of galleries, with fine effect. To this magnificent building—which gave a new dignity to the basilica form, and endeavored to heighten it, though in a rather labored way, by the addition of a dome—there was added in 1153 a Baptistery (also a domed structure, 93 feet diameter, with a corridor and galleries) by Diotisalvi. Its exterior is elegantly proportioned, having a row of columns below, and a gallery above. The original roofing was a conical tower-like roof over the round central nave, and low, nearly flat roofs for the aisle which forms the outer ring; the present arched up side roofs being more recent. There is also a campanile, begun in 1174 by Bonannus and by a German artist, William of Inns-

bruck, the leaning attitude of which was perhaps caused in the first place by the foundations giving way, but afterward retained from caprice. Modern investigators, noting the great number of buildings in Italy which have towers or fronts or internal piers built intentionally with a slope, are inclined to think that the Pisa tower was also such a structure. The chief argument against this theory is the excessive slope of the tower, which instead of being a slightly marked diversity, pleasing to the eye, which hardly measures it, is an overhang

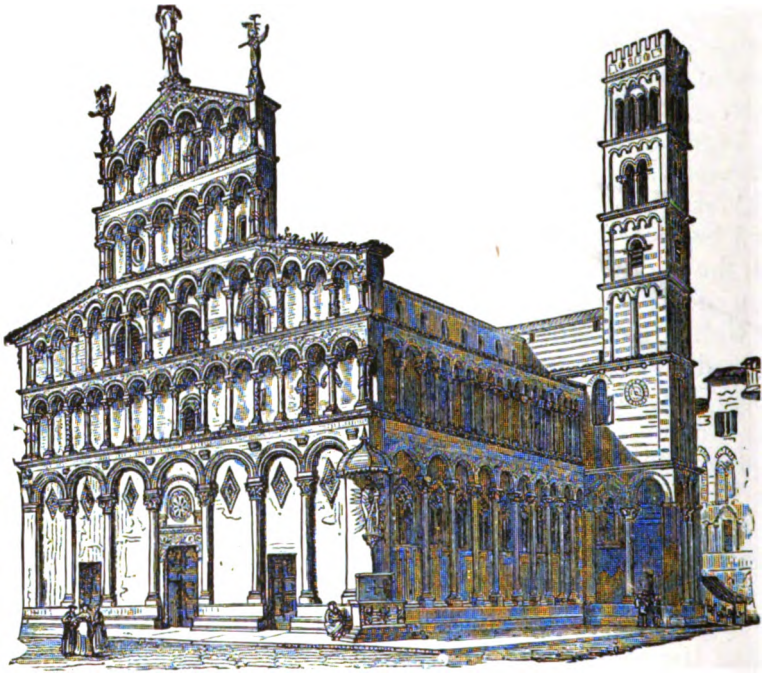


Fig. 335. San Michele. Lucca.

of thirteen feet in a height of a hundred and eighty. It is a high cylindrical building, encircled from top to bottom with open arcades with columns, and illustrating in all its details the classical tendencies of the Pisan school.

This Pisan style was adopted in the neighboring places; for example, in the buildings of Lucca, which are of analogous plan, especially in the execution of the exterior and the treatment of the façade, although more odd and fantastic. Of these, San Michele is especially noteworthy (Fig. 335), and also, although on a smaller scale, San Frediano, a five-aisled basilica, with many suggestions of the antique.

The Florentine buildings constitute a special group, distinguished

by a particularly fine coating of marble, and an equally original development of the basilica plan. The little Church of San Miniato, charmingly situated on a height above the city, and dating from the twelfth century, is the most attractive of all. In spite of its limited dimensions, it is the most striking monument of the art of this epoch, both as regards originality of plan and thoroughness of execution. A

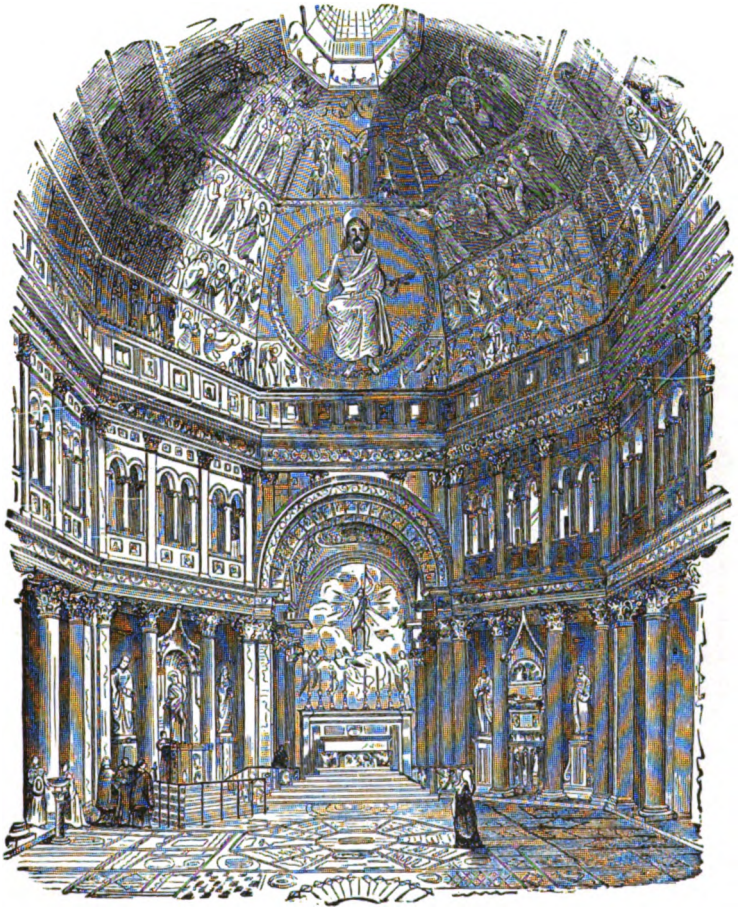


Fig. 336. Baptistery at Florence.

pier composed of four half-columns—that is, engaged columns, not standing free, but attached, pilaster-like, to the pier—alternates with two columns; the piers supporting two great arches that span the nave, as we have already seen it in S. Prassede's Church in Rome (see above, chapter on Early Christian Architecture). At S. Miniato, however, this arrangement accords better with the pre-

vailing style, and the proportions of the interior thus receive a most spirited effect. The choir is raised, and thus brought into prominence by the placing beneath it of a fine crypt, not many steps below the nave. The façade, with its marble front, its lower row of engaged columns with arcades, its upper pilasters with entablatures, is in the severest and noblest modified classic style. It is renaissance before the Renaissance. We find the same dignity of design in the Florentine Baptistery (Fig. 336)—an effective octagonal domed building, 88 feet in diameter, with fine Corinthian columns around the walls, and a gallery above, which opens upon the interior through a series of coupled arches between Corinthian pilasters.

Fig. 337. Apse of the Cathedral at Palermo.

In strong contrast with this massive, distinct architecture, are the buildings of Sicily* and Lower Italy, which embody a lively imagination and a curious blending of different forms. These states were, for a long time, under Byzantine domination; after which they attained a high state of culture under Mohammedan rule. In the course of the eleventh century the Normans conquered them, and came into the inheritance of this mixed civilization, to which they added elements of their own. The plans of the churches bear a resemblance to the ancient Christian basilica. The dome over the transept, the mosaics, and other ornaments, were taken from the Byzantines; the Moslems contributed the higher, pointed arch and the stalactite vaultings; finally, the Northern spirit usually suggested a tower for the façade. There resulted, from this mixture of foreign elements, a whole which atones for all lack of lofty, individual development by power of imagination, lavish ornament, and an effort of solemnity.

The Castle Chapel of Palermo, called La Capella Palatina, is a

*Duca di Serradifalco, "Del Duomo di Monreale," etc. H. Gally Knight, "Saracenic and Norman Remains in Sicily." Hittorf et Zanth, "Architecture moderne de la Sicile."

little gem of this architectural style, built by King Roger, and consecrated in 1040. The mosaics on the walls, the costly ornaments, the gayly painted and gilded ceilings with their stalactite vaultings, shine out in wonderful splendor from a mystic half-light. The Cathedral of Palermo (built 1169-85) is an especially fine example of exterior decoration, consisting of painted patterns, intersecting arches, rich friezes and battlements (Fig. 337), producing a gay, fantastic effect. Its fine tower also makes it noteworthy. But the Conventual Church of Monreale, built by King William II. in 1174, and magnificently situated upon a cliff not far from Palermo, shows the most splendid conception of all. The ground-plan is that of a three-aisled church of colossal proportions, with a transept, and a wider choir with three apses. Slender, antique marble columns with superb capitals support the lofty pointed arches of the nave, which is covered by a flat roof of a later period, and remarkable for its height. The entire surface of the walls is covered by an inexpressibly profuse mass of mosaic pictures, as though with costly tapestries. In nobility of proportions, distinctness, and harmony, and in lavish wealth of coloring, this interior produces one of the finest church effects in the world. The façade is bordered by two towers, connected by a columned hall. The Duomo at Cefalù shows similar features.

The Byzantine influence is most distinctly traceable among the buildings of Lower Italy, especially in the employment of stilted arches, both round and pointed. An instance of this is the large, almost square atrium of the Cathedral of Salerno, where Corinthian columns are connected by stilted round arches. Only the extensive crypt of the old duomo remains in its ancient condition. The Cathedral at Amalfi has a picturesque double-aisled porch with a peculiar pointed arch window, and with a high, irregular flight of steps. The Cathedral at Ravello, situated above Amalfi, on a steep, rocky height, exhibits the ancient basilica character in spite of modern restoration. All three duomos have in common the original—evidently primitive—arrangement of a wide transept. The simple basilica style prevails for the most part in these countries, although in contracted forms. The exteriors, however, are sometimes richly decorated, testifying to Tuscan influences. The Cathedrals at Bari, Ruvo, Trani, and especially the splendid Troja Duomo, are the most important of these buildings. The Cathedrals of Bitonto, Bitetto, and Molfetta also deserve mention.

Most of these churches contain splendid decorations in the same spirit shown by the works of Cosmati, although enriched and brightened by a mixture of Moslem ornamentation. There are a very

rich pulpit, choir railings, and candelabra, in the Cathedral at Sessa; an extremely sumptuous pulpit in the Cathedral of Ravello; a pulpit no less rich, and recalling the antique in the most admirable manner, in the Cathedral of Salerno; and, to conclude, the superb canopies above the sarcophagi of King Roger II., of the Emperor Frederick II., of the Emperor Henry VI., and their consorts, in the Cathedral at Palermo, all severely antique in treatment.

We come upon a different manifestation of foreign influence, although related in kind, in Venice. The bold Venetian sailor-merchants found their way to the East at a very early period, and returned laden not only with Oriental productions, but also bringing

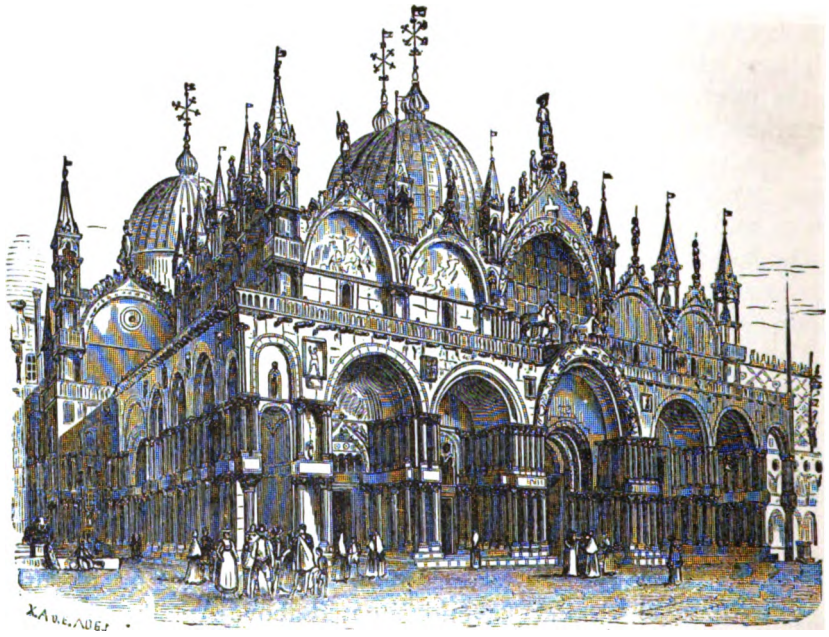


Fig. 338. San Marco. Venice.

back with them Oriental art, and love of display. The masterpiece of Venetian architecture, San Marco, the costly church of the patron saint of the city, is a direct product of the influences of Byzantine architecture. The church, which contained the bones of the revered saint, was burned in the year 976, at the time of an insurrection, and was rebuilt with greater magnificence: the main part, however, was not completed till 1071; and its costly decorations were added and perfected in the course of the following centuries. The church is in the form of a Greek cross, of which the arms and intersection are marked by five cupolas, low and shallow, as seen from within,

Piazza dc San Marco. The high tower is the Campanile or bell-tower which fell to the ground in 1902. *The lower part of this was Romanesque of the eleventh century, but the belfry and spire were of the Renaissance. The church to the left of the tower is that of San Marco, famous for its exquisite mosaics and facings of rich marble, and on the left of that again is the palace of the Patriarch at the end of the little square called Piazza dei Leoni, or the Square of the Lions. On the left of this square tower is that of the Clock (Torre del Orologio), under which is the archway which leads to the Merceria, or quarter of little shops. On the left of this again, the long line of arches is the Procuratie Vecchi and under the arcades of this are shops and cafés. On the right, two arcades of the Ducal Palace are seen between the Campanile and the Procuratie Nuove; this last named building having a third story added, is now called Palazzo Reale (Royal Palace).*

VENICE
PIAZZA, ST. MARK'S, AND CAMPANILE

but covered by loftier wooden shells which are impressive as seen from without. These are 42 feet in diameter, and as high again from the ground; the central dome being six feet higher from the ground than the others. The main building and the transept have three aisles; a division which is marked by rows of columns. These columns support a narrow gallery not thrown across the side-space of the aisle but forming an upper passageway from part to part of the church. The naves and transepts end in apses, the principal apse alone appearing in the exterior. The result is a harmoniously constructed, centralized building, which testifies to its Byzantine origin, not only in all characteristic details, but also in the decoration of the arches with rich pictures in mosaic upon a bright gold background.

The lower pillars and surfaces of the walls are inlaid with great marble slabs of different colors. The impression given by this subdued pomp is most imposing, toned down as it is to a solemn dignity; and it has, besides, a picturesque charm in its various vistas.

A great narthex extends along the whole west front, and beyond it, returning on the north and south. The southern arm is partitioned off and divided into two chapels, one of them used as a baptistery; but the west and north sides are open continuously, and have their walls and vaulted roofs sheathed with mosaic. The exterior of the vestibule opens (Fig. 338) with a row of deeply recessed doorways, the walls of which are adorned by a perfect forest of small columns. The exterior is greatly modified from its earlier simplicity, with high-arched gables and still later Gothic pinnacles, but with the lofty domes, and the rich decorations in gold and in colors that cover every part, the effect of the whole is like that of some magic structure risen from the sea, or some Eastern enchantment; and, with the historic associations that cluster about it, it produces an intense poetic effect upon the mind of the observer. There are other buildings on the Venetian lagoons, resembling this in style, although of more modest proportions.

We have still to consider a numerous and important architectural group, which, unlike the other Italian schools, was more directly affected by the Northern spirit, and, by its adoption of the vaulted basilica, is allied to the tendencies of the Romanesque architecture on the other side of the Alps. I refer to the works of the Lombards,* and of the states belonging to them, which, in the beginning of the Middle Ages, were under the rule of the Longobards, who especially inclined to Germanic manners and customs. Hence arises that common impulse in the details of these buildings toward the abrupt and

* F. Osten, "Die Bauwerke der Lombardei." Heider und Eitelberger, "Denkmäler des oesterreichischen Kaiserstaates."

the fantastic, which is so sharply opposed to the gentler treatment of the Central Italians, based upon antique models. The use of bricks preponderates, necessitating a massive treatment, but inducing at the same time a rich surface decoration. Occasionally a marble ornamentation is used. The tower is not included in the design of the façade, in spite of the frequent suggestions of the Northern manner; but it is

Fig. 339. Cathedral at Modena.

frequently attached as a piece of decoration to the nave, and this in such a way that the relation of the lower side aisles to the higher middle space is lost sight of. This form is certainly as clumsy as ill-proportioned, and is far surpassed in artistic merit by the plan of separating the tower wholly from the church building, as at S. Mark in Venice, S. Zeno at Verona, and many less important churches.

The Cathedral at Modena holds an important position among these structures. It was begun in 1099 by Master Lanfrancus, but

only consecrated in 1184. It has a main building with three aisles, without a transept, but with three apses; an extended crypt beneath the choir; and the whole arrangement of the supports calculated for a vaulted building, so that simple columns alternate with piers having engaged columns (Compare Fig. 294). Still the upper wall of the nave exhibits a freer arrangement, with triforium-like openings with small columns, occurring over the lower arcades. These, however, serve neither as galleries, nor as passages surrounding the nave, but they rest upon the moderately high side aisles, which have similar blind triforia in the walls built upon the supporting arches thrown across them. The construction of the exterior is especially marked: it is encircled by open galleries, the arrangement of which suggests the inner triforia (Fig. 340). Especially on the façade, which is distinctly divided into three portions, this gallery plays an important part in the composition of the whole. Three doors open into the nave, the middle one with a little porch, such as are usual in the churches of Northern Italy, the columns of which rest upon sculptured lions. The rich wheel-window of the upper part is also a favorite design of Lombard architecture.

Of a somewhat similar plan is San Zeno in Verona; only that here the vaults, with which the alternating columns and pillars were connected, are not in place. The nave was meant for a vaulted roof, as is shown by the very massive and highly organized vaulting shafts which rise from the capitals of the clustered piers and have capitals of their own at a much greater height. The church is now roofed by a highly decorative wooden roof of a general form used elsewhere in Verona. Within and without there is much use of color in bands of differing materials, and the campanile, one of the finest in Italy and having a two-story belfry, is adorned in the same way. We have an example of such a building, with its different divisions fully developed, in San Michele at Pavia—a clumsily substantial, vaulted basilica, with fantastic, eccentric details, galleries above the side aisles, and an undivided façade gable. San Ambrogio at Milan is equally important, closely resembling the last-named church, also with an undivided gable, in front of which there is an extensive atrium. This latter exhibits the piers constructed with engaged columns, and with cross-vaultings in a well-developed Romanesque style, which belongs at the earliest to the eleventh century—a fact also shown by the details. The nave has also piers with engaged columns and cross-vaults of wide span, with galleries above the side naves. There is the same heaviness in the proportions, and the same character of Northern energy in the details, which are observable in the pronounced Romanesque forms. In front of the choir there is a

vaulted dome, although there is no transept. Finally, S. Antonio at Padua ("Il Santo"), restored 1117, expresses the vaulted architecture of Germany in a freer, more elevated, and more consistent manner. This building has a well-defined ground-plan, with an extended transept elevated by a dome, and with apses not only at the façades of the wings, as is the case with the Pisa Cathedral, but also on the eastern side of the wings. The piers are numerous, but constructed alternately with engaged columns. Above the arcades are the galleries, which give upon the central nave by triforium-like openings. The division of the vaulting into wide square spans has been abandoned, and narrow rectangular divisions have been substituted. The façade, ending in an unbroken gable, is superbly decorated, and has three rich portals resting upon lions.

3. *Romanesque Sculpture and Painting.*

A.—THEIR SUBJECT AND METHOD.

The plastic and the graphic art of the same period cannot bear any comparison with the rich and buoyant picture of Romanesque architecture. The spirit of the times was as favorable to the development of architecture as it was prejudicial to the higher perfection and freer bloom of the sister arts. It lay in the very nature of the whole movement of development, that the general ideas, fixed and determined by the life of the time—a life controlled and guided by a hierarchy—should, for the moment, reign supreme, and find their fit expression in architectural work. The prosperous growth of the painting and sculpture, on the contrary, is more dependent upon the freedom of the individual, and upon the importance given to him in the life of the community. This was greatly limited in the Romanesque period, and, indeed, throughout the Middle Ages—at first by the conventual, and afterward by the corporate element. In the epoch we are considering, however, when the practice of the arts was, for the most part, confined to the monastic clergy, ecclesiastical tendencies were predominant, and the narrow horizon of the monastic cell was identical with that of art itself. Here, too, its relation toward tradition was long the decisive and guiding element; for the school of painting of ancient Christian days was taken in connection with church architecture as a basis for the whole wide realm of Western art. Even now Christian art sought only to convey moral teachings and to sanctify, and was incapable of aught else. Its images are always the same: the narrow circle of symbols is repeated on every hand; and

conventional, external signs and emblems are always requisite to a comprehension of the work.

The form which characterizes these images, and even the technique employed, are no less traditional. As in the days of ancient Christianity, the antique conception is the ruling one. It is, perhaps, especially manifest in the drapery, but is also shown in the general arrangement throughout the whole Romanesque period. The antique elements were, of course, received in the already stiffened and distorted shape which they gained in the old Christian epoch. The work compares with real antiques in this respect, as the rude imitation of the Corinthian capital with its original. Decline was continuous in the first period, because the yet unskillful, rude spirit of the German people was slow to accept and understand the antique form and its traditional meaning, and to succeed in developing from this germ a new life with fresh and original power. A period of acclimatization, as it were, was necessary for the foreign seed to overcome the rigid chill of the yet uncultivated Northern soil, and to prepare that soil for its better reception. A fresh growth then followed, which was still characterized by antique conceptions of form, but in which the German spirit expressed itself in original adaptations and modulations.

Through this adherence to tradition, the demand for innate meaning, and the close relation in which it stood to architecture, sculpture from the first received a severe canon of style, which served as a guiding rule in its future progress, and kept it from error. Christian dogmas, which saw nothing in nature but what was sinful, and hostile to spiritual welfare, restrained art from the study of nature; and the antique conception, therefore, held good and sufficed for a time, until hand and eye were freed by constant practice, and were prepared for an unbiased study of natural objects.

The range of thought in sculpture was almost exclusively ecclesiastical at this time; although there are examples of the illustration of secular history—such as the famous Bayeux tapestry, in which workers of the epoch wrought the conquest of England by the Normans; or the mural paintings in Merseburg Castle, setting forth Henry I.'s victory over the Hungarians. The Church, ruling supreme, not only drew all artistic talent to its service, but gave it the widest field, the most varied opportunity for activity. There were choir screens, pulpits, doors, and whole façades, to be carved; the extensive surfaces of roof and wall within, and even, at a later time, the windows, gave room for important series of paintings; the various vessels required in the mass gave occasion for every kind of artistic skill; and the help of painting was called in to decorate manuscript books with rich illuminations.

Even in the choice of subject, the Church gave the greatest scope to the artist by adding to the portrayal of sacred figures every other conception known to the learning of the time. This generally drew largely upon ancient legendary lore, whose characters are often mingled with the utmost simplicity, and sometimes even in symbolical relations with Christian imagery. The personifications used may be traced to the ancient world—such as those of sun, moon, months and seasons, streams, etc.; and allegorical figures of virtues and vices, sciences and industries, were also favorites. The old fabulous forms of sirens, centaurs, and satyrs, were most abundantly employed, although conventionalized to mere ornamental forms. It is often hard to say how far the desire for symbolism is to be sought in works of this era, and where it limits the free play of artistic fancy; but assuredly both elements appear side by side. Even heroes of the Northern sagas sometimes find place, although but seldom. Figures from the German animal epic are more frequent, in which the primitive idea of the foul Fiend's struggle to tempt and destroy mankind is often treated with lively humor. Animal forms are always an important element in the symbolism of mediæval art; and scientific treatises were written which endeavored to exhaust the simple knowledge of natural history of that age in a wealth of symbolical references. But as their significance was even then faint, confused, and altogether capricious, it soon came to be used in so bewildering and indistinct a way, that the lion stood alike for Christ and the Devil.*

This whole wealth of symbols weaves its fantastic web about the real fundamental idea of these representations, which constantly follows, with all manner of variations, the Christian theory of the fall of man and his redemption; sometimes treating it simply, sometimes elaborately. The prevailing architectural law of the time sets before us whole series of subjects grandly conceived and clearly arranged. The single image, the individual form, is comparatively unimportant. It only fulfils the law of its being in connection with others, in intimate relation with its surroundings, in subordination to a deep, significant whole. To make these relations as full and rich as possible, the parallelism employed even in ancient Christian times, and typically harmonizing the events of the New Testament—the scenes of Christ's life and sacrificial death—with the stories of the Old Testament, was taken up, accepted, increased, and developed. Sculpture, therefore, reaches a grand intellectual depth of delineation in this period, taking as a center the idea of the redemption, and gaining from the sum

* See, on the curious subject of these Bestiaries, D. Rock, "Textile Fabrics." Reference to pages in Index, under "Zoölogy." See also Viollet-le-Duc, "Dictionnaire de l'Architecture," etc., under "Animaux," "Bestiaires," but principally under "Sculpture."

total of the remaining conceptions those delicate allegorical relations which run through the web of the design from every side like slender, gay-colored threads, and add the bright images of fancy to the severe simplicity of the original plan.

As to style, the character of these works is, as befits their inner meaning, solemnly earnest, full of dignity, thoroughly and severely typical, and indicates that they are bound together by a common traditional origin. Within this harmonious form there are many divisions into national and local schools; and the extremes of awkward and clumsy, but fresh and natural efforts, and of technically correct but stiff productions, continually meet, the latter being especially results of Byzantine influence. Then, too, there are variations produced by the different materials employed, and the special style of work required by them; and, finally, there is an advance from severity to freedom, from clumsiness to delicacy and dignity. But there is not the same striking and universal mental development that was effected in architecture by the undeniable material advantages of its more highly developed constructive power. The independent genius, which succeeded in preserving its peculiar importance even in architecture, finds a far broader field in the development of sculpture, and draws profit from it the more freely as chance and the personal capacity of the individual become more and more harmonious with increasing practice. But, on the whole, there was an evident and all-pervading difference betwen the work of Italy and that of Northern nations, which should serve as a guide in our examination.

B.—HISTORIC DEVELOPMENT.

IN THE COUNTRIES NORTH OF THE ALPS.*

The peaceful conditions and great prosperity of Germany under the Saxon emperors, their position as successors of the old imperators, gave free scope to the popular spirit, as shown in fine art. The manifold relations in which it stood to Italy excited a taste for sculpture, and gave many fresh impressions of the rich treasures of ancient art, which must have had a greater and more lasting effect upon the foreign visitor than on the native himself. There was also no lack of Byzantine influences, which were of material importance in the de-

* Müller, "Beitrage zur deutschen Kunst und Geschichtenkunde." E. aus'm Werth, "Kunstdenkmäler des christlichen Mittelalters in den Rheinlanden." E. Förster, "Denkmäler deutschen Baukunst."

velopment of skill in the lesser arts. In many departments, particularly in the case of elegant stuffs interwoven with figures, even Oriental and Saracenic influences had their weight.*

Numerous interesting monuments in Germany afford an attractive picture of this gradually advancing dawn of artistic consciousness. At first, echoes of the Carlovingian period prevail. We find an antique style of treatment, mostly appearing in rude and ignorant form, but not without a germ of fresh life; indeed, a surprising vigor and purpose are often apparent in sculpture during the eleventh century. Then another tendency was aroused, principally based on Byzantine models, which led to greater simplicity and regularity. The impression of natural impulse was now repressed, and replaced by a more sober element; yet this, too, forms the basis of a higher and freer development, which increases toward the close of the twelfth century, and reaches its height about the middle of the next. The antique was again accepted as a starting-point with fresh force and enthusiasm. But the much-enlarged circle of action opened by the splendor of chivalry, the prosperity of cities, long journeys in the East, and more especially by the crusades, filled the old forms with a young, free, and noble vitality, sometimes indeed restrained by the typically severe spirit of the transition, but yet breaking out, where bold and self-conscious artistic genius had sufficient strength, in a beauty and purity which reveal a grand sense of form pervaded by a warm breath of sensibility.

Sculpture was at this time employed in many minor works, especially in ivory carvings.† This form of art was extremely popular throughout the whole Romanesque period, and its products formed an important element in the many rich utensils and articles of ornament in which the child-like love of splendor natural to a fresh young age delighted. Book-covers, small portable altars formed of two leaves like the ancient diptych, and also articles of household luxury like hunting and drinking horns, cups, etc., were made of ivory, and covered with elaborate carvings, consisting for the most part of bold reliefs, sometimes treated with a certain stiffness and ponderosity, sometimes even rudely and clumsily executed. But wherever we find either real Byzantine work, or a copy of it, there is a remarkable delicacy and clear grace of art, such as distinguishes this smooth and polished kind of work. As a rule, there is more intellectual freshness in the works of this kind, with all their stiffness, than in the Byzantine.

* See the learned work of Dr. Rock, "Textile Fabrics."

† See, as before, Mr. E. Fortnum Drury's work on "Ivories," the original edition and the abridgment, published among the South Kensington Catalogues; London and New York.

A great number of such specimens have been preserved in museums, libraries, and in the treasuries of churches. A pregnant example of that earlier style may be seen in the ivory panels of the reliquary in the Castle Church at Quedlinburg, assigned (probably correctly) to the days of King Henry I. They represent events in the life of Christ, such as his washing of Peter's feet, his blessing his disciples, the Marys at the sepulcher, and the transfiguration on Mount Tabor, but in so clusmy and ignorant a fashion that they may fairly be ranked with the very beginnings of art. The general plan of the ancient Roman drapery is preserved; but every approach to a true outline of the body, every suggestion of organic structure, disappears utterly. Yet in this very childish lack of skill there is a trace of the dignity of ancient art, and it accords well with the sacred nature of the subject. There is a noteworthy exception to this rule in the shape of a diptych in the collection of the Hotel Cluny at Paris, dating back to the time of Otto II. That Emperor married the Greek princess Theophania; and if this connection did not introduce a strong Byzantine element into German art, it will certainly be acknowledged that many smaller specimens of Byzantine work must have been brought into the country, and must have incited men to copy them by their mere technical superiority. The afore-mentioned diptych, with its reliefs, affords a lively idea of the results (Fig. 340). We see the figure of Christ enframed by pillars—a figure of imposing height, and robed in raiment of ancient fashion—laying his hands in blessing on the heads of the smaller figures of Otto and his spouse. The artist seems also to have carved his own figure under that of the Emperor, in the spirit of the time. A hunting-horn (Fig. 341) pre-

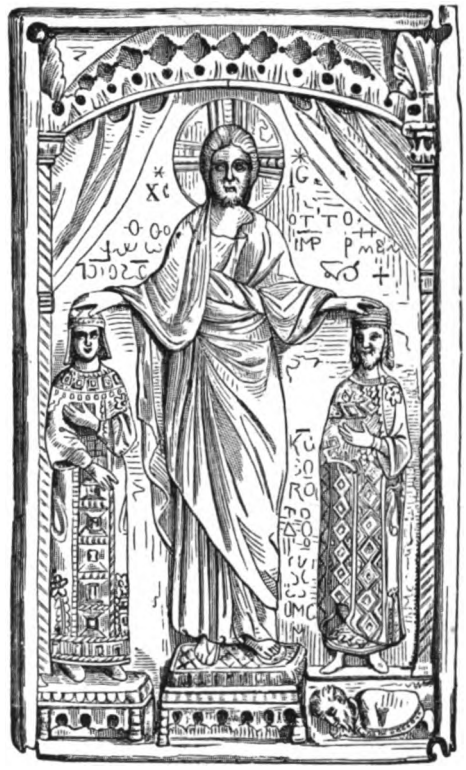


Fig. 340. Ivory Relief. Paris.

served among the treasures of the Cathedral in Prague* shows the living charm which the fanciful imagination of that time tried to lavish on every-day utensils. The chariot races, the form of the quadriga, the figures of griffins and centaurs, and the gladiators preparing for combat with them, point directly to antique models; while the character of the foliage decoration is unmistakably Romanesque in form, so that the work probably belongs to the eleventh century.

Fig. 341. Reliefs on a Hunting-Horn. Prague.

The bronze articles of this era are of great importance. Many very fine ones are connected, in one way and another, with Bishop Bernward von Hildesheim (died 1023)—a learned man, prominent in politics as well as in the church, and equally familiar with art and science. He was himself a practical artist, as proved by still existing works from his hand. The first are the bronze doors of the Cathedral at Hildesheim,† decorated with sixteen bas-reliefs arranged in

* "Mittelalterliche Denkmäler der oesterreichischen Kaiserstaates," vol. ii., p. 127, with beautiful illustrations.

† Kratz, "Der Dom zu Hildesheim," 3 parts, 34 plates and text, Hildesheim. 1840.

two rows. One series contains scenes from the Old Testament, from the creation of the world to the death of Abel; the other illustrates the life of Christ, from the Annunciation to the Ascension, without any attempt at severe parallelism. This style is extremely primitive; the figures are treated with entire lack of skill. The relief, singularly enough, is confined almost exclusively to the lower half of the figures, while the upper part is scarcely raised from the surface; nor is there the slightest attempt to fill up the space at command in an artistic way. But, despite these technical defects, the work is interesting through its undeniable expression of life, and even of dramatic action. Abel falling beneath his brother Cain's blow, Cain shrinking from the threatening hand of God, are instances of child-like freshness and energy. Bernward achieved another and more important work in a bronze column, which once sustained a crucifix in the cathedral choir, but now, stripped of its capital, stands in the square outside. It evidently owed its origin to the impressions made on the learned bishop in Rome; for figures wind spirally about it as around the pillars of Trajan and Marcus Aurelius, these figures being taken from the life of Christ, reminding us of their Roman models in the very lavishness of the relief, and affording us a proof of how unsettled in those days was artistic practice, and how little understood were the laws of style. A similar bronze door may be found in the Augsburg Cathedral, probably dating back to the latter half of the eleventh century. Certain bronze tomb slabs show that tomb monuments were occasionally made of bronze at this period; and they all portray the deceased in low relief, and with very slight feeling for nature and truth. The oldest of these slabs occurs in the Magdeburg Cathedral; another, in the Cathedral at Merseburg, represents the aspirant to the throne, Rudolph of Swabia, who fell in 1080 (Fig. 342). The bronze figure of a man holding a light, in the Erfurt Cathedral, belongs to the same period.

Fig. 342. Tomb-Slab of Rudolph of Swabia. Merseburg.

A large font in S. Barthélemy at Liège, cast in 1112 by Master Lambert Patras of Dinan, belongs to a more advanced period. Like the famous Sea of Brass in the court of Solomon's temple, the basin rests on twelve figures of animals, which also embody an allusion to the apostles. On its external surface are five reliefs, whose subjects relate to the holy office of baptism. We see John baptizing publicans, and preaching in the wilderness; the inscription referring to the "greater than he that was to follow" (Fig. 343). Then there is the baptism of Christ, and two other baptismal scenes taken from the Bible. This composition is already far freer and more raised, the form of the figures more natural, than before: the drapery is simple

Fig. 343. Relief from the Font in the Church of St. Bartholomew, Liège.

and clear, the whole pervaded with a fidelity to nature which pleasantly permeates the antique conception. The Cathedral at Osnabrück, designed by one Gerhard, contains another work of the same era. It represents the baptism of Christ, with an angel handing in officious haste a cloth to dry the Saviour. Here, too, a fresh, natural feeling, and effort toward dramatic action, successfully animate the stiff form. The doors of the Cathedral at Novgorod, and the bronze doors of the Gnesen Cathedral, also belong to the same period. The Cathedral at Hildesheim possesses a still richer font, of the thirteenth century, resting upon personifications of the rivers of paradise, while the surfaces are covered with animated bas-reliefs. In other church vessels the same love of rich work, and the same technical skill in the production of larger works of cast metal, are evident. We cite as examples the splendid seven-branched candlestick in the Cathedral at Essen, one of the few existing examples of a copy of the seven-branched candlestick in Solomon's Temple, so popular during the

Romanesque period; also the richly decorated sconce in the Prague Cathedral, whose bright mixture of graceful vines, human figures, and strange animals, forms an attractive example of the rich, fanciful, and significant school of Romanesque ornament (Fig. 344). The corona (circle of metal for holding lights) of the Minster at Aix, endowed by Emperor Frederic I., deserves special mention as a fine work of the closing period. Similar ones may be found in the Cathedral at Hildesheim and the Church at Comburg.

Fig. 344. From the Candelabrum in the Cathedral at Prague.

The works above mentioned being of a more movable character, we have now to consider sculpture, which was executed in stone or stucco, in the interests of architecture, and for the display of which doors, choir screens, etc., gave ample opportunity. The greater difficulty of handling the material made it natural that the demand for such decorative works should not be great until a period of richer development. Among older productions of the kind ascribed to the eleventh century are two interesting stone bas-reliefs in the Minster at Basle, which contain four representations of martyrs, and figures of the apostles, in pairs, between small rows of arches. Here, too, there is a manifest attempt to copy life, and a certain fidelity to nature, together with clear and effective drapery. The much-discussed colossal relief cut upon the "Externsteine," in Westphalia, hewn from a stone wall thirteen feet wide and over sixteen feet high, belongs to the early part of the twelfth century. It represents the Descent from the Cross, and is valuable for its deep symbolic meaning. The half-figure of God the Father hovers above the cross with the standard of victory, ready to receive his Son's soul, while sun and moon are placed on either side, as witnesses of the event; and at the foot of the cross Adam and Eve, as representatives of mankind, encompassed by the dragons of sin, stretch their arms imploringly toward their Saviour. Some traces of deep feeling shine with real force through the rude crudity of the picture, and the spaces are also arranged with due regard to architectural laws. Especially is this the case with the Virgin Mary, who is here represented as on the point of fainting, and holds the drooping head of her son in a close

and sad embrace, and presses her cheek to his in anxious love. The sensitive soul of a gifted artist speaks plainly here, even amid the close bonds of tradition.

The basilicas of Saxony and Thuringia (the ancient provinces bearing those names) contain a long list of compositions in relief and of consistently advancing stages of progress. Among the oldest and most severe are the figures of Christ (Fig. 345) and the apostles, executed in stucco on the parapet of a western gallery in the Church at Gröningen, near Halberstadt. The stucco reliefs on the choir screen in the Church of the Virgin at Halberstadt are freer and more fully developed, also portraying the apostles with Christ in their midst on one side, and his mother on the other—works in which the severe style has already developed into singular mellowness. Less noble, but more animated, are the figures in relief on the choir screen of S. Michael at Hildesheim, which are represented, not in a sitting, but a standing posture. This style attained a perfection rare at this period, and an almost classic grace, in the stone carvings at Wechselburg, near Dresden, and Freiberg. In the old monastic Church now connected with the Schloss at Wechselburg they chiefly take the form of reliefs in the chancel, treating of the doctrine of the redemption. Christ enthroned, surrounded by evangelical symbols, Mary and John on either hand, the mediators for mankind at the throne of the Most High, form the central group. Christ's sacrificial death and work of redemption are typified by the sacrifice of Isaac and the worship of the brazen serpent. Cain and Abel (Fig. 346) offering up their sacrifices stand for the good and the bad in their relations to God. Here, again, the symbolic significance is pervaded with freer artistic feeling, breathing a new and noble life into the traditional conceptions of nature. The altar of the same church, an extensive open arcaded structure, adorned with sculpture of a milder, freer, and more mellow style, and crowned by a crucifix between the figures of Mary and John, belongs to a somewhat earlier stage of development. It is a work of great merit

Fig. 345. Relief in the Church at Gröningen.

and surprising fidelity to nature. The most superb work of this final period, dating near the middle of the thirteenth century, or at the time of the beginning of the Sainte Chapelle in Paris, a perfectly developed Gothic structure, is the sculpture on the "golden gate" at Freiberg. This is the chief doorway of the old cathedral, elsewhere replaced by a late Gothic structure built after the burning of the older one. On the tympanum we find Mary enthroned with the infant Christ, who is adored by the three kings; while the figures of the Trinity, surrounded by angels, appear in the archivolt. On either side of the door, between the rows of pillars, four figures standing free are carved, representing the prophetic annunciation of the Messiah in varied symbolism. The whole has a deep, inherent connection; but the subjects are freely and independently handled. The sculpturesque treatment strikes us in the same way —delicate and refined, of youthful grace and free imaginative conception, even inclining to tenderness. The execution of the heads and the drapery at once recalls the dignity of antique art; but here a new vigor and deep sensibility find successful expression. These superb pieces of sculpture are by far the most admirable of the best and noblest work of the concluding Romanesque period, and their existence can only be explained by the assumption that they are the work of some peculiarly gifted artist. Yet they are evidently related to the vigorous and important plastic efforts to be found in Central Germany from the very first. We also find an analogous case in the classic delicacy and elegance of the richly modeled ornamental sculpture, such as is to be seen, for instance, in the Cathedral at Naumburg.

Fig. 346. Relief in the Church at Wechselburg.

A kindred effort, based on pure beauty and free action, is manifest, although more severe in character, in the reliefs on the eastern choir screen in Bamberg Cathedral. As for the monuments of Southern Germany, on the contrary, such as the portal of S. Gall in the Basle Cathedral and others, they testify to a striking persistence in rude,

clumsy rigidity, which, especially in many Austrian edifices—as, for instance, the Church at Schöngrabern*—contrasts strangely with the elegance of the merely decorative carving.

Many French works of the same school date back to the beginning of the twelfth century.† The most comprehensive monument of this epoch is formed by the sculpture on the main portal of the Abbey Church at Conques, representing in popular style the Day of Judgment. Christ, surrounded by angels, sits severe and stern upon his throne, in a mandorla or almond-shaped (i.e., pointed) halo. Below we see the separation of the good from the bad, who are led away to Paradise or the torments of hell. The whole large tympanum is filled with these sculptures, which have suffered very little. Later in the twelfth century, the custom was adopted, in France, of loading the capitals of columns with historical scenes from the Bible and from legendary lore, or with purely imaginative or symbolic figures. The limited space led to a somewhat wild, inartistic crowding of images; and the style of the figures varies from the stiff and lifeless to an almost barbaric wildness; as, for example, in a capital in the Church at Vézelay, representing Moses and the worship of the golden calf in rude, fantastic fashion. Sometimes heads of great interest, as being apparently portraits, are mingled with leafage; sometimes domestic animals or fowls, and sometimes lions and other savage creatures form the great *crochet* or angle piece at each corner; and at Moissac (Tarn et Garonne) a fierce head being established at each angle of the capital at top, two bodies and two necks are appropriated to it with admirable decorative result. At Notre Dame du Port, in Clermont-Ferrand, are griffins drinking from a font, evidently copied from some piece of Græco-Roman work. As the twelfth century advanced, the realism of these compositions increased, and we have figures in vigorous action mingled with the scrolls and leafage as if really entangled in vines. But sculpture was also employed elsewhere, especially on doors; and whole façades are carved in the same conventional style, particularly in the

Fig. 347. Statue from the Main Portal of the Cathedral of Chartres.

* G. Heider, "Die Kirche zu Schöngrabern"; Vienna, 1854.
† See Viollet-le-Duc, "Dictionnaire de l'Architecture," art. "Sculpture."

South. Thus in the Church of S. Trophime at Arles, there is a great portal which contains the often-recurring subject of the Last Judgment, spread over the tympanum, the soffit of the great arch, the lintel-course below the arch, and the wall-surface below and on either side. Still more in the famous Church of Saint Gilles the front with three portals and a massive colonnade separating and including them is adorned not merely by the sculptured tympanums of the three doorways, but also by long stretches of frieze carved with figures and statues larger than life between the columns of the lower story. In the north, in the center of France, are many superb doorways, as at Vézelay, Alençon, Poitiers, and Bourges. The statue compositions of Chartres and Le Mans are named below.

A more luxuriant fancy prevailed in Western France, notably in Poitou, decking the façade of the Cathedral at Angoulême with its most brilliant results in gorgeous decoration. Toward the close of the twelfth century, a severe revival of the old hieratic forms is noticeable in the northwest of France, shown by an almost columnar rigidity of figures, and a delicate but formal and architectural regularity of folds in the drapery, not dissimilar to the archaic sculptures of Greek art. The doorways of the Cathedrals at Bourges, Chartres (Fig. 347) and Le Mans are admirable specimens of this tendency, which might seem an anachronism if it were not the basis on which a new, generous, wondrously free and complete style of architectural sculpture was to be built up side by side with the new architectural life, dating from the beginning of the thirteenth century. The excessively tall and slender figures of the west front of Chartres and the south portal of Le Mans are deliberately planned to comport the better with the upright masses of the architecture. But with the closing years of the twelfth century are seen the first signs of a more perfect control over the materials and the conditions and the earliest Gothic porches have sculpture which is less formal and unreal, although equally valuable as decoration.

A transition from sculpture to painting is made by certain works of decorative art, which seek to gratify the splendor-loving tastes of the time, not only by the combination of the most varied and costly materials, but also by the union of the sculptor's and the painter's skill. Generally a metal ground, either of gilt, or copper, or silver plates, is covered with fine filigree patterns, gay enamel, precious stones, and especially with antique gems and cameos. Whatever any one had that was precious was devoted to the execution of such works, especially book covers, little altars, censers, reliquaries of all sorts, processional crosses, and even to the adornment of the larger altars with the so-called antependium. Various as are the

materials and the skill, these objects possess a highly picturesque charm, and are often of considerable original importance as works of art. Despite the fact that much has been destroyed, many noble and rich specimens still exist in museums and churches. The use of enamel was universally popular, first diffused by Byzantine examples, and afterward cultivated with great success at Limoges. The Byzantines soldered gold threads to the metal base, which divided the different colors, and prevented them from running together when melted (*émaux cloisonnés*); but the European workman hollowed out the ground to receive the enamel, and allowed the untouched

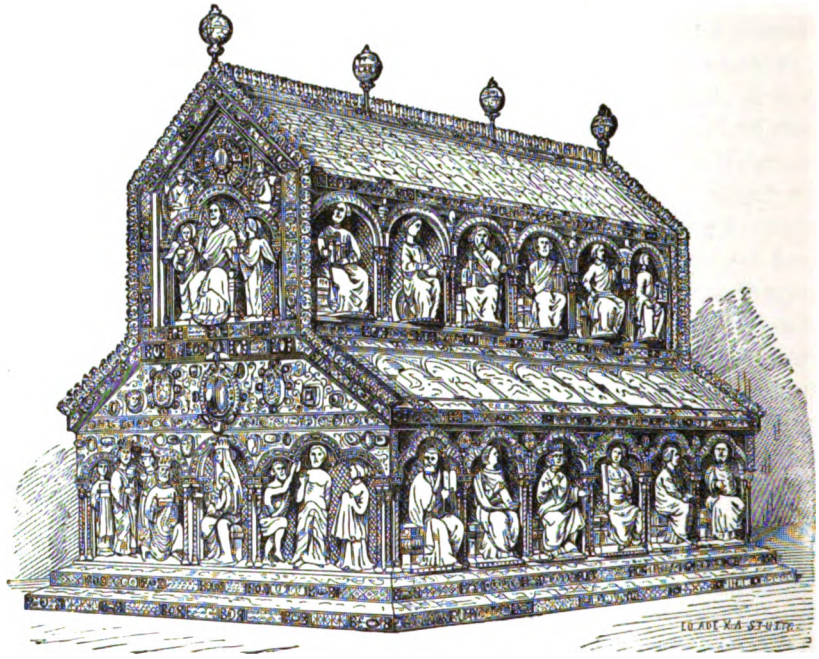


Fig. 348. Shrine of the Magi, Cologne.

surface to show as a border (*émaux champlevés*). In Germany it was more particularly in the Rhenish art schools, as at Cologne and Siegberg, that enamel-painting was cultivated.

Splendid works of this kind, dating from the eleventh century, are found among the treasures of the Church at Hildesheim, the Cathedral at Essen, and the Parish Church at Siegberg. The following century was uncommonly active in this direction, so favorable to the development of ornament and luxury, and more especially so in the manufacture of large reliquaries, in the form of oblong caskets with roof-like covers, resembling small, costly buildings; as, for

example, the beautiful casket of St. Heribert at Deutz; the two elegant jeweled reliquaries of St. Crispin and St. Crispinianus in the Osnabrück Cathedral, which are also decorated with arabesques; the two in the Minster at Aix; and the magnificent shrine of the Magi at Cologne, which also belongs to this concluding period, and is most exquisitely executed (Fig. 348). Among the most famous works of the kind is the Altar-frontal at Kloster-Neuburg near Vienna,* which was made by the artist Nicholas of Verdun in 1181. It is formed of fifty-one gilded bronze tablets, entirely covered with scenes from the Old and New Testament, engraved in deeply incised

Fig. 349. From the Verdun Altar at Kloster-Neuburg.

lines, filled in with red and blue. These engravings are of great value; for the skillful hand of an original and gifted artist is apparent in the dignity and grandeur of the figures as well as in the dramatic action. One picture represents Samson wrestling with the lion (Fig. 349); and, though violent and harsh, it is powerful, bold, energetic, and full of passionate action.

In the consideration of painting, we find the miniatures† in books to afford the most fertile field for the study of the various stages of

* Reproduced by A. von Camesina and Arneth in their publication, "Das Niello-Antependium zu Kloster-Neuberg," Vienna, 1856; and again, later, by Heider and Camesina.

† Kugler, in his "Kleine Schriften zur Kunstgeschichte," vols. I. and II., Stuttgart, 1853, gives numerous and faithful copies.

development. They begin with the barbaric imitation of the antique, universally prevalent in the Carlovingian epoch. In this department, Germany was rich in the earliest times. Her monasteries possessed the greatest knowledge of science, and fostered in their schools the study of ancient literature, which shows its results in the multiplication of books on many subjects, even of many poetical attempts, such as the comedies of the nun Roswitha of Gandersheim. As was generally the case with the art of the time, the illuminations with which the manuscripts were adorned were not studied from nature, but from traditional types. The figures have no natural surroundings, but stand out against a bright background often resembling tapestry; and are set in some architectural design, generally a pillared arcade. The magnificent missal in the royal library of Munich, identified as having belonged to the Emperor Henry II. (1002-24), has a page filled with figures on a diapered background: in front, the Emperor, his arms held up by haloed personages; and above, Christ in the mandorla, who places one hand upon the Emperor's crown and lifts the left hand in blessing. Angels fill the upper corners, and long legends in capital letters adorn the friezes which separate the compartments. The marriage of the Emperor Otto II. with the Greek princess Theophania, late in the tenth century, was of the utmost importance to the technical execution of this art; Byzantine art products being then introduced into Germany in great profusion, and the fine style of Byzantine workmanship acquiring a controlling influence. These works were copied the more zealously since they furnished a fixed canon adapted to universal application. The scale of colors was made richer and more manifold by the introduction of middle tints; but, as before, the essence of this art consisted in strongly outlined drawings, forms and draperies being strongly defined, and filled in with colors more or less flat, with occasional slight shading, the lights being laid on in white or yellow. The distribution of colors was directed by a general law of harmony, rather than by any regard to nature; and the hair and beard are not infrequently blue or green, if those colors seemed to the artist the most decorative. The faces are of a pale gray or greenish hue, which, taken in connection with the lean, haggard figures, and the lifeless, mechanical drapery, give a harsh, forbidding aspect to these pictures, in spite of all their display of color. Yet this chrysalis state of stiff formality preceded the birth of a noble and free art.

One of the most important works of this early period is the copy of the Gospels made by Bishop Egbert of Treves, which is in the town library of Treves. It is a work of the close of the tenth century. The coloring exhibits a lively, charming variety; the figures

of the evangelists are grand, and strikingly dignified, though somewhat stiff. Early in the eleventh century, in the reign of Henry II. (the saint), the art of illuminating made great progress, owing to that monarch's pious zeal. The libraries at Bamberg and Munich still contain a number of superb manuscripts, presented by him to his favorite foundation, the Cathedral of Bamberg. Later in the eleventh century, affectation impaired this style, making itself manifest in strangely distorted figures, intricate drapery, and repulsive ugliness, thus betraying a deep decline in art. But in the twelfth century, under the lead of architecture, it awoke to new life, to stricter conformity to law and to purity of design, which at first, indeed, threatened a revival of Byzantine stiffness, but soon, especially after the middle of the century, paved the way for a freer and more lifelike use of the old types. Under this favorable influence, miniature painting rose to that lofty, thoughtful, and imaginative conception which is shown in all the more important efforts of Romanesque art. The Strasburg Library formerly possessed one of the best works of this period in the "Hortus Deliciarum," which was written, and adorned with numerous illustrations, by or for the Abbess Herrad von Landsberg in 1175, to which the varied study of nature and life lends its simple charm.* This magnificent manuscript was destroyed during the bombardment of 1870. Three passionaries from the monastery of Zwiefalten, in the Royal Public Library at Stuttgart, are brilliant examples of a free and lively fancy which delights in marginal ornaments and initials.

Illuminating assumed a different style toward the close of the twelfth century, excited by the growth of chivalric poetry, which seems to have prevailed in Southern Germany, and particularly in Bavaria. It bears the same likeness to the former style that the simple popular ballad does to the solemn music of the mass. It appears mostly in the shape of slight pen-and-ink-sketches, in black and red, and sometimes lightly tinted. They are not so splendid as the earlier works; but neither are they so melancholy and severe. They are better adapted to tracing the flights of fancy, and expressing the poetic power of imagination. And as, in the development of music, the melody that lives in the songs of the people must come to the aid of the severely classical composition before a higher stage can be reached, so these simple pen-sketches seem to form the transition to that period in which the painter found a freer field wherein to express the emotions of his inner life.

It is generally some chivalric, secular poem to which these pretty

* Reproduced and described by Ch. Engelhard, Herrad von Landsberg, etc.; Stuttgart, 1818.

illuminations are added as ornaments, betraying, in their ingenuous, natural style, a hitherto unknown freshness of sensibility. But there were also many religious works with similar illustrations. The Berlin Library owns a manuscript of the monk Werner von Tegernsee's* poem on the life of the Virgin Mary, the illuminations in which reveal rare and vigorous feeling for truth and nature (Fig. 350). Another manuscript in the same collection, the "Æneid," by

Fig. 350. Apparition at the Birth of Christ. (From the Manuscript of Werner von Tegernsee.)

Heinrich von Veldeck, follows closely in this respect, as is shown in the picture of Dido giving free vent to her grief before Æneas, while he vainly strives to comfort her (Fig. 351).

French illumination in its development followed the same lines as in Germany; but of pure French work little is known previous to the Gothic epoch. Anglo-Norman manuscripts, that is, those written and painted for the Dukes of Normandy, who were also kings of England, form a style apart; and under the name of English illumination have been much studied. The whole western part of what is now France was controlled by those sovereigns down to the close of the fourteenth century; and the division between styles is to be made

* Compare Kugler's "Kleine Schriften," vol. i.

along a line drawn from Amiens to Bordeaux, all to the west of that being rather Anglo-Norman than French. England, on the contrary, continued to cling to the traditional Anglo-Saxon style of her early period far into the time of the Norman, until there, also, a change to the true Romanesque style of treatment took place.

Romanesque painting developed broader effects in the mural paintings of the churches. The style of these works was developed nearly in accordance with that of illumination, save that their solemn subjects, and their direct connection with architecture, lent greater sublimity to their general manner, limiting the freedom of action, but frequently replacing it by an impression of great dignity and power. There are sufficient examples to prove that it was a general custom to paint

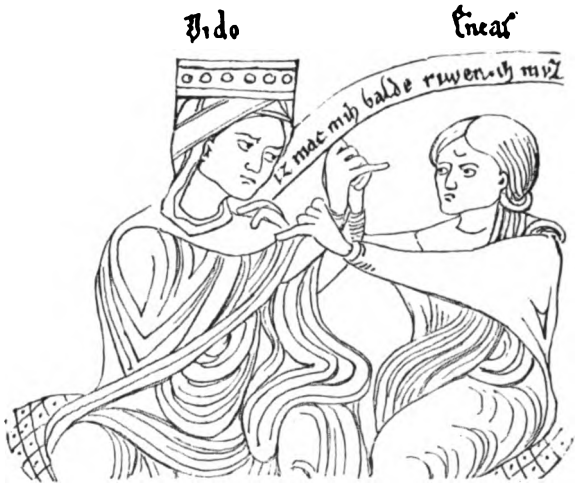


Fig. 351. Dido and Æneas. (From the Manuscript of the "Æneid.")

the whole interior of churches—the walls, vaulted roofs, and wooden ceilings—and by this means to complete the artistic character of the whole, and to give it an expression befitting its sacred character. A simple, energetic style of figure drawing, which stands out in bold colors, generally against a blue background, was the element which produced this imposing result. Added to this was a clear architectonic arrangement, divided by painted ornamental bands of rich and tasteful pattern, and lending a clear distinctness, rhythmic alternation, and rich life to the vast whole.

Numerous writings testify to the extensive use of mural painting during the eleventh century; but nothing remains which can with certainty be attributed to this period.

Among the oldest works, dating perhaps from the tenth century,

is to be reckoned a representation of the Last Judgment on the western apse of the church at Oberzell in the plain or island of Reichenau, in Baden, showing Byzantine influence; then, in the same place over the arcades in the nave, some Biblical scenes occur, probably of the eleventh century. These are the Raising of Lazarus, of the Youth at Nain, and of the Daughter of Jairus; the Casting Out of the Devils, the Storm Upon the Sea, and the Healing of the Blind. It is deserving of notice, how vigorously German art aims at liveliness of motive. Between the upper windows appear the figures of the apostles, and there is a Christ, in the mandorla, of great beauty. All this work is done in pale browns, grays, and dull

Fig. 352. Wall-Painting in St. Savin.

reds on a brighter green background. S. Michael's Church at Burgfelden in Württemburg, has on the nave wall a Christ in glory with a broad band or frieze of angels. At Reichenau-Niederzell, in the Church of Saints Peter and Paul, is a similar decoration, and there are vigorous figures of saints under the arches of an arcade. A work of strictly Byzantine conception, belonging probably to the end of the eleventh century, is the decoration, with half-figures of saints, in the vestibule of the Conventual Church of Nonnberg at Salzburg, productions solemn in bearing and of imposing effect.

France possesses in the Church at S. Savin in Poitou one of the grandest and most comprehensive examples of mural painting. Probably executed during the first half of the twelfth century, this series

of pictures is grandly severe and concise in conception, and of pathetic effect (Fig. 352). They begin in the crypt with scenes from the legends of the saints. The choir and its chapels display the imposing figures of the Saviour and patron saint of the country, and illustrate the New Testament. On the vaulting of the nave are illustrations of the Old Testament; in the west porch, scenes from the apocalyptic vision; and in the galleries above, scenes from the Passion, and legendary events. The conception is severe and typical throughout; the figures are lean, long, and of the Byzantine type; but we trace the simple grandeur of antiquity in the drapery. These elements combine to produce an impression of grave dignity, which sometimes, as in the portrayal of Moses receiving the laws on Mount Sinai, rises to a really solemn effect. A painted ornamentation, which covers

Fig. 353. Wall-Painting from Schwarzrheindorf.

every part of the architecture—the architraves, shafts, and capitals of the columns—gives an harmonious finish to the whole. Of the same epoch is the decorative painting in the Church of S. Philibert at Tournus (Saône-et-Loire); also that of the church at Montoire (Loir-et-Cher), in which occurs the singular emblematic figure of Christ enthroned and surrounded by the mandorla, but with a separate circular glory about his feet. This composition is splendid with color, and the linear composition with details of extreme interest. A little later are the beautiful paintings on the vaults of the church of Petit Quevilly; a flight into Egypt is of peculiar excellence, as an almost realistic rendering of the event. Of the very close of

the Romanesque epoch is the painting which remains in the monastery of Rocamadour (Lot). Here in the chapel of S. Michael are an Annunciation and a Visitation, somewhat grotesque in line and harsh in color, but highly wrought in the modeling of the flesh.

In Germany, the wall paintings in the lower story of the curious double church of Schwarzrheindorf, near Bonn, rank first among the works of the progressive twelfth century in extent and artistic import. Executed soon after 1151, they give an impression of rare power and significance by the profound imagery contained in them. In the center of the main apse we see the Saviour enthroned; in the northern apse is the Crucifixion of Christ; in the southern, the Transfiguration on Mount Tabor (a few figures from which we give in Fig. 353)*; at the western entrance is the Driving of the Money Changers from the Temple, as the first divine lesson to those who enter the house of God. Amid these images, and in the broad rounded surfaces of the vaulting, we see single figures of saints, allegorical personifications, and portraits of kings and princes. Even on the vaulting are scenes of deep symbolic meaning, apparently referring to the contrast between the true worship of God and idolatry. The figures are drawn in simple outline and coloring on a dark blue ground, bordered with green. With these narrow limits we discover a rare purity of feeling, a lofty freedom of composition, an intellectual vigor and fullness of life, which undeniably indicate great artistic power.

During the final period of the Romanesque style, mural painting, especially on the Lower Rhine, in Saxony and Westphalia, seems to have developed extensive works in this severe traditional style. The most notable are the paintings in the Chapter House at Brauweiler, in the Nicholas Chapel of the Cathedral Church of Our Lady, at Soest, and in the Church at Methler, in Westphalia, and above all the important paintings on the vaults of the choir and transept of the Brunswick Cathedral. These are of the thirteenth century, and are much fuller and more brilliant in color than what the earlier churches have to show. One of the best works of this period is the wooden ceiling of S. Michael's Church at Hildesheim, which contains Christ's genealogical tree, or the so-called "Tree of Jesse," in extremely beautiful compartments, and in a rich, ornamental frame. A series of medallions begins with the fall of man, and continues through the progenitors of Christ to Mary (Fig. 354) and the Saviour enthroned in glory; while smaller medallions on either hand portray the countless patriarchs and prophets of the Old Testament.

* The illustration given is taken from the drawings by C. Hohe, in the Museum of Berlin.

In spite of the typical formality of style, there is a certain freedom in the work, which is also shown in the rich folds of the drapery.

Also in Southern Germany and in Austria many traces of Romanesque mural painting have survived. Thus, in Suabia, the relics in the Convent Church of S. Gilgen, near Comburg, and the paintings in the crypt at Alpirsbach; those in the Nonnberg Church at Salzburg, in archaic Byzantine style; those in the belfry of the Abbey

Fig. 354. From the Roof of St. Michael in Hildesheim.

Church at Lambach, which are no less primitive; further in Tyrol,* the mural paintings in the Catherine Chapel of the Castle at Hocheppan, likewise uncommonly severe; those in S. James's Church at Tramin, which are bold and animated, as also those in S. John's Chapel of the Cathedral at Brixen, which show greater freedom of

* G. Dahlke, in "Repertorium für Kunstwissenschaft," v., vi., ix.

composition; others in S. Nicholas's Chapel, near Windisch-Matrei, have unfortunately been painted over. Dating from the closing epoch of Romanesque art, the grand cycle in the nuns' choir of the cathedral at Gurk in Carinthia is especially noteworthy; above all, a superb Madonna enthroned, surrounded by noble figures representing the virtues, while the seven gifts of the Holy Ghost hover above her in the guise of doves, works of supreme grace and solemn dignity, ranking with the best which that period has produced.*

We find a similar mode of treatment and artistic arrangement in glass painting, which was perhaps first employed in Byzantine buildings before the tenth century, but whose known monuments of value first appear in Germany in the Romanesque period, and which was followed up with great success, in France from the twelfth century. No window can be set down as positively anterior to 1200. The few early examples presented to us are distinguished by simple, severe handling, and superb, glowing color. The chief effect is produced by the colored glass itself, arranged in a kind of translucent mosaic; the painting upon it with vitrifiable color having but a small share in the early windows. There are several small windows in the possession of the Société des Arts Décoratifs, which were brought from Châlons-sur-Marne. All the French archæologists agree in fixing the years 1230-50 as the epoch of these, the earliest fully completed designs in window decoration. Of the same date are windows in S. Remi at Reims (Marne), at the Church of the Abbey, Church of S. Denis (Seine), and several at the Cathedrals of Le Mans and Bourges. All these are, however, complete triumphs of the art; the doubtful first experiments are lost. In Germany, in like manner, a few twelfth century pieces exist, as in the Church of Neuweiler in Alsace; but here, also, we have no complete knowledge of the state of the art previous to the year 1200.

ITALY.

While Italian art† generally followed the laws of development observed by Northern races at this period, to a certain extent it now opened an independent path, by which it passed to a very different goal. In the early periods, from the fall of the Empire to the tenth century, Italy had sunk to a low point both of general culture and artistic skill. The scarcely credible crudity of the time is strikingly shown by the bronze doors of San Zeno at Verona. They are

* Published in "Mittheilungen der K. K. Central Commission," xvi.

† Seroux d'Agincourt, "Histoire de l'Art." Cicognara, "Storia della Scultura," Venice, 1813. A later edition in a different form, 1823.

formed of nothing but small tablets in relief, laboriously secured to heavy doors of oak planks; and of astonishing rudeness, particularly those on the left wing of the door. Among the numerous stone carvings of the time, we may mention, as an example of this barbarous style, a representation of the Last Supper in the chancel of San Ambrogio at Milan. The only works of this period which show any refinement are those which betray direct Byzantine influence. The universal spread of this influence in Venice and Lower Italy is still proved by various large works which are thoroughly Byzantine in style; as, for example, the bronze doors of the main portal of S. Mark's in Venice; also the doors of S. Paul's Without the Walls, at Rome, which were made in Constantinople in 1070, and were destroyed by fire in 1823; and the bronze doors of the Cathedrals at Amalfi, Salerno, and Monte Casino (1067), which are of similar workmanship. All these works are reputed to have been brought from Constantinople. They are not mainly in relief, like the San Zeno doors, but are of that Oriental style in which the figures are engraved on brass, and have the incisions filled up with inlaid silver threads (damascening). The few figures represented at Amalfi are of stiff Byzantine design; while those at Salerno are rather better, and more naturally drawn.

A new tendency arose with the beginning of the twelfth century, but in a fashion which might be deemed the barbaric dissolution of all artistic form; for a rude, wild realism took possession of Italian sculpture, simply doing away with the old typical canons, without introducing new laws. The doors and façades of Upper Italian and Tuscan churches bear abundant traces of this new movement; but the less interesting they are, the more artlessly the maker parades his name upon them. If we compare with this our almost total ignorance of the names of the German sculptors of this period, even of the makers of very important works of art, we see that the self-consciousness of the artist was developed early in Italy. But this free forth-putting of personality is one of the powerful levers which finally raised Italian art to such a height. Two relievo tablets with the figures of Luke and John probably belong to this period. They were formerly in the porch of the church connected with the Baptistery at Aquileja, and give an idea of the strange symbolism of the Middle Ages (Fig. 355). There was a revival of bronze-casting in Lower Italy toward the close of the century, which replaced the Byzantine damascening of a century earlier by a natural and flexible style of execution in relief. An important example is the bronze door of the Cathedral at Ravello, dated 1179; the figures being treated in a new manner, following the classic models. The archi-

tectural borders surrounding the tablets and separating them are richly decorated with fine Romanesque foliage. The figures are indeed somewhat stiff, but quite free from rudeness. Barisanus of Trani is named as the maker of these doors; and he executed similar ones, which are still extant, for the cathedrals at Monreale and his native city Trani. The finest bronze reliefs of the time are those of Benevento Cathedral, where the main doors are covered with bronze plates, seventy-six in number, the joints covered by raised moldings of bronze, and the plates filled with figures of fine design, the drapery exquisitely modeled.

In such works, therefore, Italian sculpture attains a new canon of style, which only required for its higher development such genius as was displayed by the artist of the Golden Door at Freiberg, named above; and it appeared in the person of the great Niccola Pisano, born in 1204, whose works extend down to 1280. In him antique

Fig. 355. The Evangelists John and Luke. Relief from Aquileja.

art revived in splendor and power, and began a new and wondrous, though brief existence, far removed from the constrained and labored traditions which had hitherto been painfully preserved in the Romanesque style, and also far freer and more decided than it had shown itself elsewhere, even in the noblest creations; such as in the sculptures at Wechselburg and Freiberg. His work was as genuine a renaissance before the Renaissance as the façade of San Miniato or the Baptistery at Florence. But although these structures prove that genius of this style must have been innate in Tuscany at that day, the sudden appearance of this wondrous master is still inexplicable.

An early work by this master, a Descent from the Cross, in relief,

on the north door of the porch of the Cathedral of Lucca, probably done in 1233, proves that he was still held in the bonds of the universally prevalent Roman school.

In his later works the master moderated the unconditional severity of his antique conception, as is proved by his reliefs on the sarcophagus of St. Dominic in the Church of St. Dominic at Bologna, and even more fully by the pulpit of the Siena Cathedral. The latter even more superb than its Pisan predecessor, though nearly allied to it in design, was built in 1266 by Niccola, aided by his son and a few assistants. The bas-reliefs on the sides repeat the same series of scenes as are on the Pisan pulpit, only somewhat enlarged and enriched. A fresh and more fervent feeling pervades the noble antique conception, rising to the pitch of passion in the Slaughter of the Innocents and the Crucifixion, which may have been the work of his son Giovanni.

The great seven-branched candelabrum, sixteen feet high, in the north transept of Milan Cathedral, is an exceptional piece of bronze sculpture of the closing period of the Romanesque style. This grand monument of mediæval bronze rises in the shape of a stately tree with branches and foliage; dragon-like monsters form its feet; a throng of graceful figures in small groups, beginning with the fall of man, are introduced with great skill among the vines—all finished with admirable delicacy.*

Italian painting† at this period, like the great monumental works, followed in the footsteps of the Byzantines. Especially was this the case with work in mosaic, which was now much practised after old Christian traditions, at first stiff and mechanical, but displaying undeniable traces of fresh vitality and increasing originality during the twelfth century. The extensive mosaics in the interior of St. Mark's at Venice, which date back to the eleventh century (for many are of later epochs), are rigidly Byzantine. The rich mosaics of the Sicilian churches are an important contribution to the development of this style. The mosaics in the Church of La Martorana, built at Palermo by King Roger, about 1130, are entirely dependent on Byzantine art, stiff and solemn, quite without expression or spirit, and all accompanied by Greek inscriptions. Those in the choir of the Capella Palatina, at Palermo, are treated in an equally stiff, dry, mechanical, Byzantine style. In the nave we find tokens of independent life, however; and the figures, especially that of the enthroned Saviour, are full of grandeur, meaning, and expression.

* Figured in Didron's "Annales archéologiques," vol. xiii.-xv.

† D'Agincourt, "Histoire de l'art." Rossini, "Storia della Pittura Italiana." Crowe and Cavalcaselle, "History of Painting in Italy."

This style was developed with even greater independence in the exceedingly rich mosaics of the Church at Monreale. Here, again, the Byzantine element is often apparent, as in the Madonna above the entrance, whose narrow face and aquiline nose correspond to the Byzantine model. Elsewhere, particularly in the youthful figures, the antique model is followed. Fresh life breaks through the stiff shell, more especially in historical pictures. The action is duly felt, and even if awkwardly given, is effective. Indeed, a profound expression of fervor is sometimes wonderfully attained; and that excellent proportioning of space, henceforth the heritage of Italian art, is always observed; indeed, these are the finest gold-ground mosaics in the South. They are dated 1148.

In the choir of the Cathedral at Cefalù works of a kindred tendency may be seen.

Here and there a few mosaics have survived in Southern Italy. Thus, in a side apse of the Cathedral at Salerno is the great figure of the Archangel Michael with scepter and globe, beneath it S. Matthew enthroned, with four saints beside him, and the diminutive figure of the donor, Giovanni da Procida. But while these works everywhere bear the stamp of Byzantinism, we meet with an exceedingly active display of mural painting, which, although likewise showing isolated traces of Byzantine influence, breaks away with surprising energy from the fetters of that tradition, and in free creative power knows how to combine antique dignity with vigorous life.

To this category belong the noteworthy mural paintings in the village of S. Angelo in Formis, near Capua, the Church and its paintings dating from the eleventh century. In the apse there is a grand representation of the Redeemer enthroned between boldly treated evangelical symbols, among them the three archangels and the two saints. Below is a great band of saints. Next, on the choir arch, is an extensive presentation of the Last Judgment, and on the wall of the central nave are scenes from the Old and New Testaments. Over the nave arches is a nobly treated Crucifixion. The conception of the human form is still vague; but surprisingly expressive in treatment are incidents like the Crucifixion, and especially Christ and the Adulteress. The figures are grouped in a way that reminds us of fourteenth century Italian painting. Also, the picture in the apse of the Badia (Abbey) of S. Maria la Libera, at Carinola, near Sessa, dating from the same period, and representing the Madonna enthroned between two archangels, and S. Michael below surrounded by saints, is full of dignity. On the coast near Salerno is the Badia of Majori, which contains a noble Madonna with saints;

the drapery grandly modeled. In the course of the twelfth and thirteenth centuries this art advanced independently, and arrived at noteworthy results, also, from a pictorial point of view. Wholly Byzantine, yet full of noble vigor, is a Madonna enthroned, in the crypt of S. Basilio at Brindisi, especially effective through the depth of coloring. A much more diffident adherence to Byzantine models, on the other hand, is observable in the altar panels, where the mere traditions of the purely technical side of their art evidently made the painters as dependent as in the case of the mosaics. Proofs of this are to be found in the Madonna enthroned from S. Maria de Flumene, now in the Church del Rosario at Amalfi; further, an altar panel dedicated to S. Nicholas in the Church at Biscaglia, near Trani, and the Madonna enthroned in S. Stefano, near Monopoli, a work belonging to the close of this period which, in spite of its Gothic setting, still clings to the Byzantine type, although it does so with a quickening rejuvenation and a splendid glow of color.*

In Rome, too, at this period, there is no break in the sequence; and the eleventh century paintings in the subterranean church of S. Clemente are noble and dignified in design. In the twelfth century the severity of the old style is quickened with new life, though nowhere so fully as in the mosaics in the apse of S. Maria in Trastevere, which represent Christ enthroned with his mother, whom he embraces tenderly. This tendency continues here far into the thirteenth century.

Side by side with these superb works appear the products of a more modest and simple style of art, following the tendency of the Northern spirit. The most important work of this kind is to be found in the extensive wall paintings in the Baptistery at Parma, embracing figures and scenes from the Old and New Testaments, illustrating a parallelism of deep meaning; the work of a vigorous, active susceptibility to nature, often rising into passion in the historic scenes, and in the separate figures, sometimes of great beauty—as, for intance, the half-figure of King Solomon. About this time (1240) Giovanni Cimabue was born, with whose name and works we connect the lasting establishment of a sound style of painting, which did indeed have its origin in the severe magnificence of Byzantine form, but which aided to establish a new application of Nature in her truth and beauty.

Siena also took a forward step in painting at the same time, as is proved by the superb picture of the Madonna in S. Dominic, which bears the name of Guido da Siena, although the date given (1221) is impossibly early. It is marked by the same struggle to change and

* All these monuments are reproduced masterfully in chromotype in Salazaro.

transfigure the Byzantine form, together with a strong feeling for beauty and a clear flow of lines. These are the latest men of the time of first preparation. Duccio of Siena and Giotto of Florence take up the work, and the new epoch begins.

Chapter IV.

THE GOTHIC STYLE.*

1. Character of the Gothic Period.

IN the last period of the Romanesque style we saw the rise and gradual spread of an intellectual movement which sought to escape from the old rigid, traditional limits to new and freer forms. The revolution first shows marked results a little before the beginning of the thirteenth century; but it is not everywhere equally decisive and speedy. As long as it was merely a question of inoculating the Germanic mind with Christian and ancient tradition, Germany, besides being at the head of European political affairs, under the rule of her energetic emperors—recognized everywhere as the first princes of Europe, and the true successors of the shadowy dignity of imperial Rome—was also a leader of the other nations in civilization. But now, when the last step was to be taken, when the rights of the individual perception were to be vindicated, the kingdom of France—and especially the northeastern part of the modern state of that name, in which the Germanic element was the strongest—assumed the leadership. Here no such close and varied relations with Italy had existed as in Germany; and the country was therefore somewhat more independent of ancient traditions. Chivalry had developed there more rapidly and more brilliantly than elsewhere. During the First Crusade, princes giving allegiance to the French crown were the leaders. During the Second, the feeble Louis VII. of France with his followers bore at least half of the weight of the enterprise, and Bernard of Clairvaux, a French Burgundian, was the real leader. King Louis IX (the Saint) even undertook an independent crusade as late as the middle of the thirteenth century. Thus, the great social revolution which

* Gonse, L., "L'Art Gothique; l'Architecture, la Peinture, la Sculpture, le Décor." Moore, C. H., "Development and Character of Gothic Architecture." Prior, Ed. S., "A History of Gothic Art in England." Scott, G. G., "Secular and Domestic Architecture, Past and Present." "On the Development of Mediæval Architecture." "Gleanings from Westminster Abbey," etc. Street, G. E., "Some Account of Gothic Architecture in Spain; Brick and Marble in the Middle Ages." Ungewitter, G., "Lehrbuch der Gotischen Konstruktionen." Viollet-le-Duc, "Entretiens sur l'architecture." Von Essenwein, "Die Romanische und die Gothische Baukunst," in "Handbuch der Architektur," pts. i. and ii.

these visionary expeditions caused in the life, manners, and views of the West was especially marked in France. The wonders of the distant Orient, the adventurous nature of the journey, the mingling with strange peoples—all these had changed the old habits of thought, and created a new circle of ideas. The old severe and formal age was past, and a new epoch had begun—stirring, brilliant, and full of varied action. At this time, too, Germany passed through that long period (1198-1250) of disorder and distraction which began with the displacement of the Hohenstaufen dynasty, and which, though favorable to the growth of cities and the burgher element, destroyed forever the powerful position of the Empire in the affairs of Europe. In France, on the contrary, the power of a kingly house, sprung from an insignificant germ, was gradually strengthened by skillful policy, and spread resistlessly from the north over the whole country. All these factors combined to place France, at this period, at the head of the movement of civilization, and to clothe the new spirit in that country, after a brief struggle with traditional forms, in a guise altogether novel; while elsewhere, in Germany as well as in Italy, a similar though less energetic intellectual movement contented itself with a richer and more brilliant adaptation of the Romanesque methods.

This new spirit, this free movement, is distinctly evident in the various branches of culture. Its dimly discerned but eagerly sought goal was the freeing of the individual from the rule of the priesthood, though only in the limited degree consistent with the religious ideas of the Middle Ages. No one wished directly to oppose the Church; though there was much less shrinking than formerly from uniting against even the highest decrees of the Pope, if need be. In the sphere of the Church itself, scholasticism rose to the highest importance, drawing out the most brilliant and the boldest minds, and leading to a more profound appreciation of religious dogmas. The more general spread of Mariolatry and the fact that religious devotion now assumed the character of a sacred love are peculiarly characteristic of the spirit of this age. This tendency, too, was most closely connected with the extreme reverence for women that then went hand-in-hand with the perfection of chivalry. In the poetry of this time the knights are occupied, as though in a holy rapture, solely with the thoughts of their mistresses and seem as though thus completely spell-bound. Nothing announces the new life of this era more strikingly than the rise of a national poesy. Hitherto the Latin language, though in a withered and distorted form, had been the only channel of intellectual expression. The historian and the poet could speak through that tongue alone, and the languages of

the people were condemned to inglorious silemce. Suddenly—near the close of the twelfth century—the national spirit seems to have become conscious of its own existence. Minstrels boldly struck their strings, and animated the long-scorned mother tongue to utter the most lofty thoughts, the deepest feelings. Provençal troubadours sang their inspired lays; and the German chivalric epic, slowly following the French example, found its most perfect development in Wolfram von Eschenbach—the highest expression of the poetry of that day.

Art could least of all escape this mighty influence. Great as had been its significance in the Romanesque epoch, it now assumed even more importance. If it had hitherto attained higher development just in proportion as it withdrew from the narrowing influences of the monasteries, it received a far deeper and stronger life now that the national spirit was directly infused into it, and the awakened feeling of the laity sought expression through it. Architecture first acquired a new, bold, and original form, in whose miraculous structures the subtlest thought finds its highest triumph; while at the same time the living effect of the whole, the freedom with which it soars aloft, and the delicacy of its proportions developed in countless graceful forms, give ample poetic expression to the awakened aspirations of the spirit. In the plastic arts, the formal style of the Romanesque was now entirely set aside; and the silent dignity of those forms which recalled ancient models now gave place to inspired fancy and sensitive imagination. A youthful, delicate life pervades every artistic creation, and affects us like the prophetic spirit of the opening spring-time.

In France this movement burst forth as early as the later decades of the twelfth century; and in the first quarter of the thirteenth it had acquired such consistency and strength, that it at once spread with amazing rapidity in all directions over the other European countries. But as the idealism of that whole period tended too strongly toward mere sentiment, and in its enthusiastic impulse kept itself too far from any basis of reality, it could not long remain at such a height. As scholastic learning soon degenerated into mere hair-splitting casuistry; as the expressions of the most delicate love soon petrified into mere conventional courtly forms; so also the arts—architecture as well as sculpture and painting—were, even as early as the fourteenth century, marked by that striving for mere external effect which is even more fatal to idealistic tendencies in art than to any others. From 1350 these ominous symptoms perceptibly increased, and with the fifteenth century began that powerful reaction toward realism and the antique which put an end to mediævalism.

2. *Gothic Architecture.*

A.—ITS SYSTEM.

The same effort which produced such important architectural changes, even during the Romanesque period, led to an architectural style which, in its principles and conditions, was still allied to that of the older epoch, but in its construction and artistic character had an altogether new and original significance. In a later epoch of partial and prejudiced ideas, buildings of this style were contemptuously called "Gothic," because it was supposed that only such barbarians as the old Goths were assumed to be could produce such works. Latterly, however, this Gothic style has won an honorable place in art history, and may continue to bear its old name; the more so that the experimental names of "Teutonic," "Old Teutonic," "German," "English," "Christian," are inaccurate, and the terms "pointed style," and "pointed-arch style," are neither exact nor exhaustive. The term "pointed style" has even been used to describe systems in which the pointed arch is much used, and which yet are not Gothic; such as the Moslem architecture of Cairo and Damascus, or some part of the Southern French Romanesque.

If we inquire into the origin of this style, which may seem capricious and arbitrary in contrast with the variety and splendor of the Romanesque, we discover that it owes its existence solely to a striving after a constructional and artistic ideal. The national spirit, once strongly roused, longed for freer, more independent expression in every sphere—it everywhere strove for the utterance of its deepest feelings; but the immediate cause of the change of style was the demand made by each town for a larger and nobler central church, and for a system of vaulting which would make such a church possible. That the resulting style was free, light, and bold in character, and peculiarly slender, bright, and beautiful, was a necessary consequence.

The pointed arch was one of the most potent aids to this revolution. This form is not new to us. We found it in Egypt as early as the ninth century, and saw it everywhere a favorite with the Mohammedans. Coming from the East it reached the Normans in Sicily; but it is also found, to all appearance as an original expedient, in the cylindrically vaulted churches of Southern France. Very probably the familiarity with Oriental buildings gained in the Crusades caused the pointed arch to be more readily adopted in Europe, as it is constantly more prevalent in German Romanesque buildings

of the latter part of the twelfth century, particularly after the reign of Frederick I. But all these examples are of a peculiarly decorative use of it, or are isolated instances. The pointed arch is never made the fundamental law of the construction; nor do we ever find vaulted roofs, arcades, windows, and niches worked out by its aid, save in the Gothic style of architecture. It is therefore one of the chief merits of that style, that it recognizes the constructive importance of this form, which had hitherto been only arbitrarily applied, and makes it the central point of its whole system.

But this importance is two-fold. The pointed arch, in its more or less acute or blunt and obtuse shapes, admits of the giving of different heights to the individual arches, or—what was more important—carrying arches of different widths to the same height. This did away with the necessity for the square division of the vaulting imposed by the Romanesque style. The broad, open vaults of the higher and wider spaces disappeared, and the nave could now have the same number of vaults as the aisles. In like manner, it now became easy to vault the irregular spaces of the curved aisle running around the apse. The arrangement of the ground-plan was therefore subject to less restraint, and the general effect of the interior became more varied. More than this, the pointed arch diminishes the side thrust because of its decreased proportionate width of span; and the pressure is downward, rather than directly lateral. This entailed another important innovation. Not only were the arches of the nave and aisles made of strong quarried stone, but the diagonal lines of the vaults had similarly treated cross-ribs; thus making a firm scaffolding, into which the lightest, thinnest possible rubble stone masonry was set as a mere filling. The massive vaulted roof of the Romanesque period, which exercised an equal weight of lateral pressure in all directions, and therefore required equally strong buttresses (heavy masses of wall), was now abandoned. It was not the stone roof only that grew lighter. Under the new conditions it was found to be only necessary to give the wall a strong support where the main arches and ribs of the roof met, in the pillars; and the intervening parts could be treated as a light wall merely for shelter, or pierced with windows.

This innovation caused a revolution to which architecture owes an entirely new change of face; for buttresses were now introduced at the points specially requiring support, and high broad windows were inserted between them, supplying the interior with an effect of light hitherto unimagined, and totally changing its character. Nor were these distinguishing features all. The majority of ecclesiastical buildings having three aisles, the side aisles being much lower than

the middle one (the nave), it was impossible to find an immediate and sufficient counter-fort for the vaulting of the latter, especially imperiled by its double height and width. One or two flying buttresses were therefore thrown from each of those points of the nave which required strengthening to the outer wall of the aisle, which thus received the whole lateral pressure, and met it by means of strong resisting piers (Fig. 356). The principle of construction already extant in the tunnel-vaulted churches of Southern France was thus remodeled to suit the new system. The advantages of a support of this kind at once led to new and still more brilliant developments of the plan in the larger churches; the high nave being inclosed on each side by two lower aisles, thus going back to the five-aisled basilica. In this case, piers were carried up from the row of pillars dividing the two side aisles, which received the flying buttresses of the nave and were, in turn supported by similar buttresses extending to the outer wall; and in cases where two arches were sometimes used, one above another, four flying buttresses even were introduced to strengthen the one point sufficiently.* Even in these important features of the construction, it is clear that the Gothic style was the result of practical considerations, and of constructive need; but, impelled by an æsthetic principle, it soared beyond mere necessity to a point to which no style of architecture before or since has ever aspired.

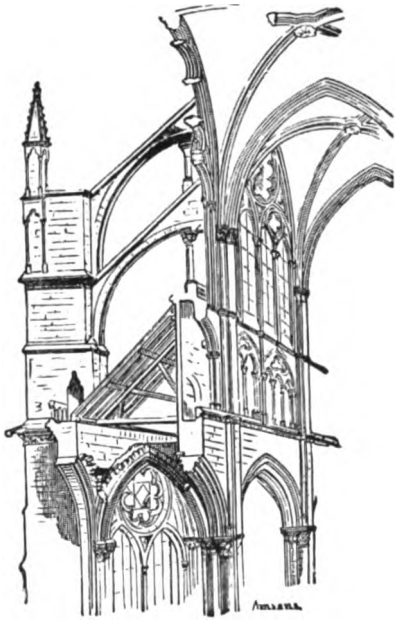


Fig. 356. Cathedral of Amiens. (Section, to show construction of vaulting.)

Under these constructive conditions, the plan of the Gothic church returned to the ground-plan of the old basilica, but with the addition of the cross-vaulting of the Romanesque structure. Choir, transept, and nave, with a large tower, continued to form the ground-plan of the church, but all these integral parts enlarged to the utmost extent,

* In the constructional theory of Gothic see Dr. H. Graf, "Opus francigenum, Studien zur Frage nach dem Ursprung der Gothik"; Stuttgart, 1878. Viollet-le-Duc, "Dictionnaire de l'Architecture," s. v. "Construction:" "Voûtes." Sturgis, "European Architecture," chapter v. ("Origin of Gothic"). Choisy, "Histoire de l'Architecture," xvi. "Dictionary of Architecture and Building," s. v. "France"; pt. i.; Gothic.

and developed into a rich, effective, and spacious whole. For the choir, the richest design which the Romanesque style had created was adopted—that of Southern France—with a surrounding aisle and numerous chapels; only, instead of the semicircular apse, a polygonal termination was used, an uneven number of sides being usually chosen, so that the axis might pass through and bisect a wall, and not an angle. The octagon and dodecagon are the favorite forms, from which the choir gets its pentagonal or heptagonal end. In a similar way polygonal aisles were added to the main building, and little chapels to them (Fig. 357). The transept also, in this richer period, has generally three aisles, and often has large portals at the ends; the nave sometimes containing as many as five aisles. The rich form of the most important early Christian basilicas is thus renewed, and even surpassed; but the effect of space is quite the opposite, because the breadth is diminished in proportion as the height is increased. For example, the nave of San Paolo in Rome is about 80 feet broad and 110 feet high; while in the Cathedral at Cologne the nave is only 45 feet wide, and 140 feet high. But the special triumph of Gothic architecture is, that it transformed the old stiff frame of the basilica into mobile architectural life, into a complete and consistent organic structure.

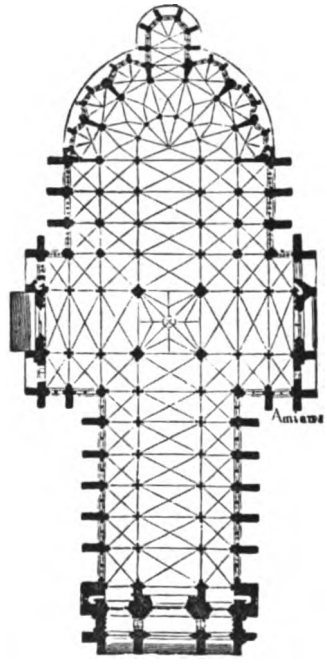


Fig. 357. Ground-Plan of the Cathedral of Amiens.

To this basis of the Gothic style the development of its details added a completely new expression. The last remnants of antique forms were done away with; and the northern mind set its brilliant impress on every detail, and marked every feature with its own laws. The piers which divide the aisles were sometimes made with a round core, to which a number of three-quarter columns were added as supports for the main arches and ribs. Sometimes the slender shafts, which in this way carried down the lines of the vaulting, were stopped at the capital of the great pier instead of reaching the floor; and in that case the pier was left a simple cylindrical shaft. Sometimes the core, or central pillar, was fluted between the separate vaulting shafts, thus affording sharper contrasts of light and shade; while the

slender uprights lose their character of individual colonettes and become mere moldings. In like manner, the delicate, sharply articulated moldings of the capitals were carried round the whole pier; which thus grew into a pillar of a new sort, having a most complicated horizontal section, adorned with a base and a capital adapting themselves to all the subdivisions of the shaft. The floral sculpture of the

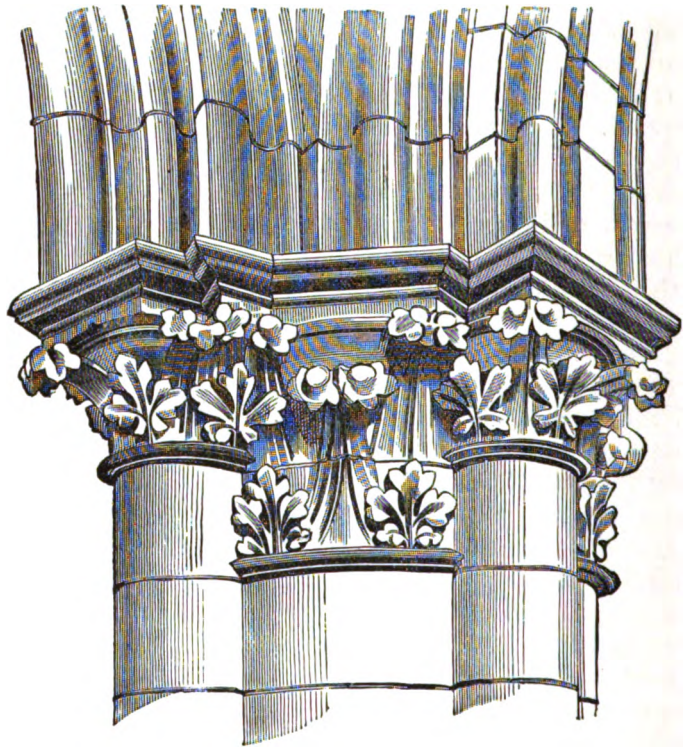


Fig. 358*a*.

capitals is often carried around the whole pier. Sometimes, also, it is mainly concentrated upon the central mass, while that of the slender members is proportionally narrow. This ornamentation was far removed from the plastic abundance and variety of Romanesque detail; while in contrast to the formal and conventional leafage of the Romanesque style, the Northern love of nature is here displayed in all its fullness: the oak, oak-leaves, the thistle, the ivy, the vine, the rose, the holly, and all the native flora, being brought into play with great effect. Animal and human forms, as well as the fantastic

images of an earlier period, are almost unknown to the earlier epoch of Gothic art* (see Figs. 358 *a*, 358 *b*).

The design of the arcade arches, and of the arches and ribs of the vaulting, corresponds to the more graceful proportions of the pillars. The stiff, rectangular form hitherto employed is first relieved by splaying, fluting, and the use of rounded moldings; but it soon assumes a form completely adapted to the new style. In this new form we find only deep fluting, alternating with round moldings, and with a projecting pear-shaped or heart-shaped section, which seems to have had its origin in a pointing of the round molding, and forms one of the specific characteristic elements of the Gothic. We generally

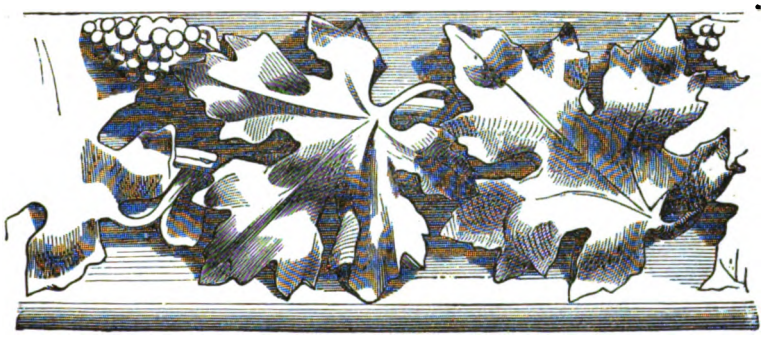


Fig. 358*b*.

find it single in the cross-ribs, and variously combined with other forms in the main arches (Fig. 359). The windows also play a very important part in the formation of this style. Even during the latter Romanesque period, there was an effort to gain freer perforation of the wall, and greater light, by grouping the windows. Here, again, the Gothic style worked out the idea to its final results. It broke the wall space between two pillars by one large window, divided in a vertical direction by stone bars (mullions) (Fig. 360). These mullions were joined at the top by small arches, and inclosed in the large arch of the window. In the openings thus formed, circles or other geometric forms were introduced in the stone tracery; and these, again, were filled with trefoils, quatrefoils, or still richer forms† (Fig. 360). These bars and this tracery received a molded or variously complicated profile; and the mullions, at first treated as slender columns with special bases and capitals, afterward passed immediately

* See Viollet-le-Duc, "Dictionnaire de l'Architecture"; s. v. "Flore," "Sculpture."

† Viollet-le-Duc, "Dictionnaire de l'Architecture"; s. v. "Fenêtre," "Meneau." See "Dictionary of Architecture and Building;" s. v. "Tracery;" "Window."

into the tracery. These broad, beautiful windows, filled with glowing colored glass, make one of the glories of the Gothic style, and undergo constant and ever-charming changes in their various combinations.

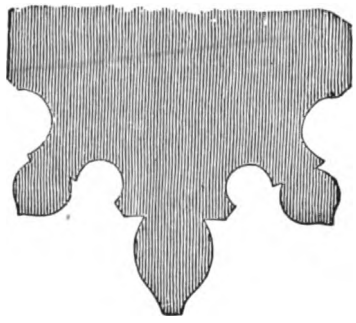


Fig. 359. Molding on Main Arch in the Choir of Cologne Cathedral. (Section.)

Under the windows of the clear story we often find triforiums, already known in the Romanesque period, and now enlivened with richer tracery, and forming, indeed, a part of the window itself. The lofty arches, slender, delicately composed pillars, and broad, glowing windows, are the chief elements in the general effect of the interior. The windows, indeed, with their stained glass, take the place of the wall-painting once so eagerly cultivated; for they almost entirely replace the walls. In contrast with the Romanesque style of architecture, the effect of the interior is free, airy, bold, and graceful. The spirit is borne aloft by the soaring pillars and lofty arches, and recognizes the inspiration of an age of fresh and ardent faith, in these sacred halls illumined by a mystic light.

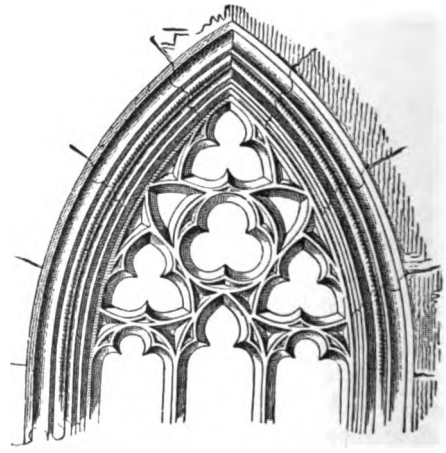


Fig. 360. Window-Tracery of Developed Gothic.

On the outside (Fig. 361) the buttress system is especially noticeable. The buttress piers have massive foundations, but taper toward the top in pyramid fashion, graduated by various fillets, and in part connected with the rest of the building. Their surface is enlivened by tracery, and by niches containing statues. The top forms a slender tower ending in a slender pointed roof (Fig. 362). Sometimes this is replaced by a canopy with a statue (Fig. 361). No less rich is the form of these buttresses, their upper edge sloping sharply down; while cut upon them are gutters to carry off the water, which is led beyond the outer buttresses through the mouths of fantastic figures of animals (gargoyles), and is thus thrown clear of the building.

The body of the buttress is generally delicately relieved by sunken panels or tracery. The whole surface between the buttresses

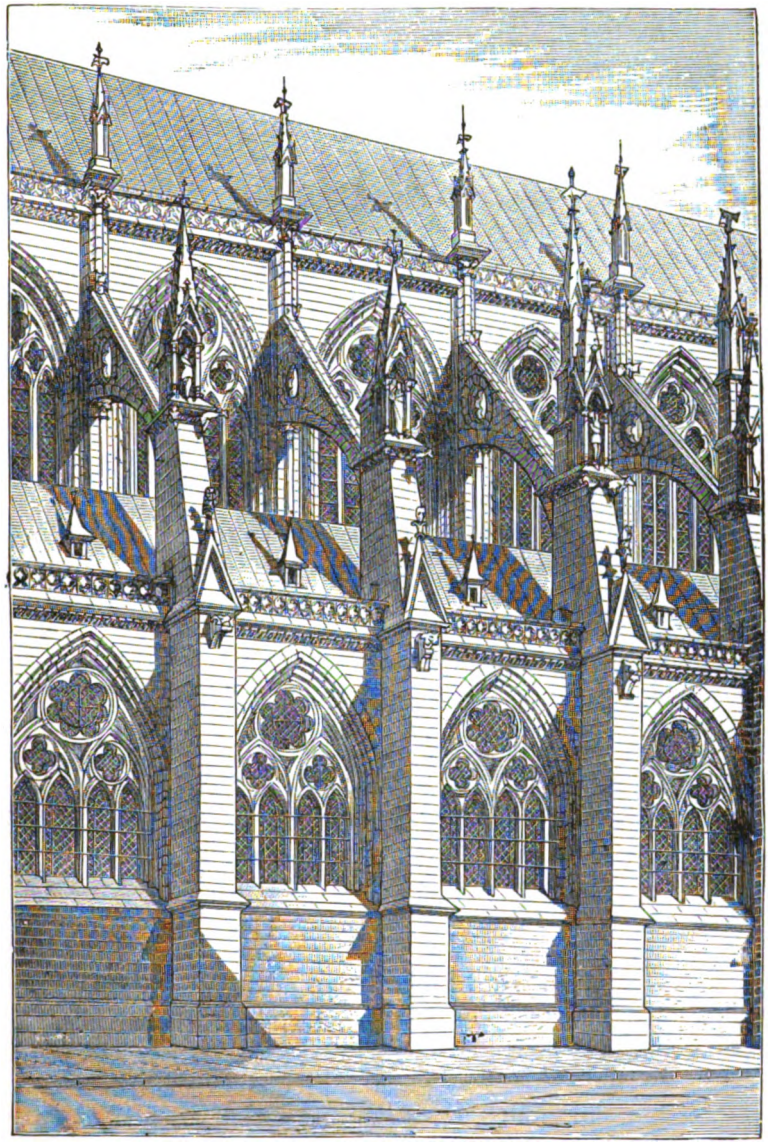


Fig. 361. Minster at Strasburg. Portion of Side. (From Dollinger.)

is filled by the broad windows, which sometimes terminate above in a projecting gable, designed to shelter the frailer portions from the weather. Its upper edges are decorated with crockets, and the apex is

crowned by a finial, while the surface was at first plain, but later was adorned with tracery (Fig. 363).

This inexhaustible richness of sculptured detail—extending like filigree work over every part of the structure, everywhere dissolving the firm outline of the whole into a multitude of airy members, and causing the stone mass to blossom, as it were, in countless flowers—produces a wonderfully gorgeous, lifelike, and striking effect; and this the more when seen in combination with the rich windows, the sharp roof cornices with their deep flutings and clear-cut projecting moldings, and the railings of stone tracery, which, with the gutters, form a border around the whole building. What a contrast to the quiet, sober masses of the Romanesque style, broken only by small windows, and relieved by inconsiderable pilaster strips or half-columns, friezes, and cornices, and seeming to bear a formal character of haughty reserve! Here, on the other hand, everything thrusts itself into prominence, everything strives for outward effect, everything endeavors to work out its individuality with spirit and energy; so that, amid all the jutting, projecting, budding details that compete in it, the effect, as a whole, is often too restless.

Fig. 362. Finial. Foundation Church at Herrenburg.

The façade, on the contrary, makes a much quieter and more compact impression, with its massive towers, which also vividly reveal the tendency to the pyramidal form, to restless growth, to tapering and diminishing forms. Often, also, the south and north fronts of the transept receive a treatment similar to that of the great west front, except that they are not flanked by towers.

The portals play an important part, not only in the façade, but also in the general exterior. Narrower and higher than those of an earlier period, they are generally divided by a central stone pillar, and display in the ornamentation of their sides a rich variety of forms. which carry on, only more boldly and brilliantly, that which was begun in the Romanesque period. This ornamentation consists of a number of sharply defined, strongly projecting, and deeply fluted members; and in the deeper flutings are statues of saints standing on slender pillars with delicate capitals; while in the archivolts separate seated figures or little groups are to be seen, ranged in rows one above the other, placed on consoles, and protected by canopies. But inasmuch as the

arrangement of these groups with their bases corresponds to the respective radii of a circle, they have something forced and unnatural about them. The tympanum under the arch is also adorned with representations in relief, that are generally arranged in separate rows one above the other; which is rather an arbitrary division than an organic proportionment of the space. Nevertheless, these portals, by the richness of their adornment, as well as by the generally significant, symbolic composition of their sculpture, create an impression of the greatest richness and imaginative power.

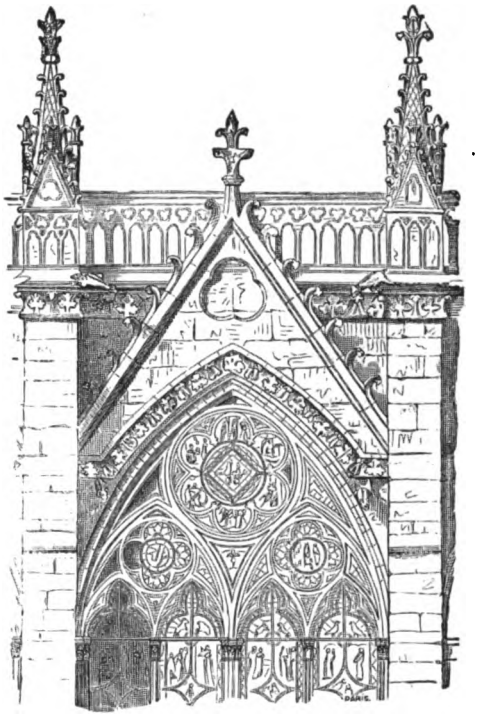


Fig. 363. From the Sainte Chapelle. Paris.

Such are, in the main, the chief features of a system, which, it is true, is not always so richly and consistently developed, and which, moreover, allows a considerable scope to national peculiarities. Everywhere the style retains its pure beauty and harmony until about the year 1300 only. From that time forth there begins a restless fermentation in architectural taste, which undermines the harmonic unity, wrests the decorative portion from its combination with the constructive, and ends in the partial dissolution of the style; which, however, gained a new splendor in the florid Gothic of the fifteenth century. We must bear in mind the peculiarity of this process of development when we come to consider the separate local groups.

B.—THE GOTHIC IN DIFFERENT COUNTRIES.

FRANCE.

The very natal hour of Gothic architecture, and the spot whence it arose, may be accurately determined as in no other case among the earlier styles. Paris with its immediate vicinity was its cradle; and the first processes of its development took place in the northeastern districts of France. The ingenious architects of Northern France, with their clever combinations, first found out how to blend into one effective whole the separate elements produced here and there by the various French schools. Before the middle of the twelfth century, while the remainder of the Western world still built and thought according to the strictly Romanesque manner, several small churches which still remain for us were built in a novel way: Tracy-le-Val, Morienval, S. Léger—all in the Department of the Osie, and therefore all within sixty miles of Paris. Soon after, a new choir was added to the Church of S. Denis, near Paris, on the North (consecrated 1144), under the brilliant and energetic rule of the art-loving Abbot Suger, which, in spite of later restorations, exhibits a complete system of buttresses, with the pointed arches accompanying it, and the beautifully designed choir with its surrounding aisle and wreath of chapels. It is true that this aisle, with its chapels, was still semi-circular; in fact, the Romanesque forms were adhered to in many matters of detail in all buildings down to the thirteenth century. Notwithstanding this, the idea of the construction and composition was a new one: it was, in short, the Gothic. The Church of S. Martin des Champs at Paris (now included in the Conservatoire des Arts et Métiers) has a choir and ring of chapels of the same date, though the vaulting of the chapels is not so developed. The year 1140 may be taken as the time of erection of both these important monuments.

A whole series of church edifices, far and near, speedily followed this system: at first exhibiting all manner of experiments and innovations, while still adhering in their details to the Romanesque element; but later showing a consistent development and progress. The beautiful Church of S. Remi at Reims, whose choir is surrounded by a semi-circular aisle with five chapels, the central one far projecting, and the grand Cathedrals of Paris, Soissons, Noyon, Amiens, all belong to this series. In all these buildings the effect of the façade is one of impressive strength and massive grandeur, adopting anew, as a special feature of the main structure, the great wheel window, rare

Cathedral Church of Our Lady (Notre Dame) in Paris. It is of the last years of the twelfth and the beginning of the thirteenth century. The view is from the southwest. The west front is much praised as a beautiful façade, but it is to be remembered that the spires are not in existence, and that on this account the intended effect is not seen. The slender spire over the crossing of the transept with the nave is of oak, and was built anew in the nineteenth century at the time of the restoration of the church. The low building on the right is the sacristy, built at the same time.

CATHEDRAL OF NOTRE-DAME, PARIS

in the Romanesque epoch—a feature destined to a richer and more splendid perfection by the adoption of Gothic tracery.

In the design of the ground-plan sundry vacillations are still apparent; for while the choir in Paris is conspicuous for a double surrounding aisle, but shows the chapel system yet scantily developed, the Cathedral of Laon has even the square termination of the

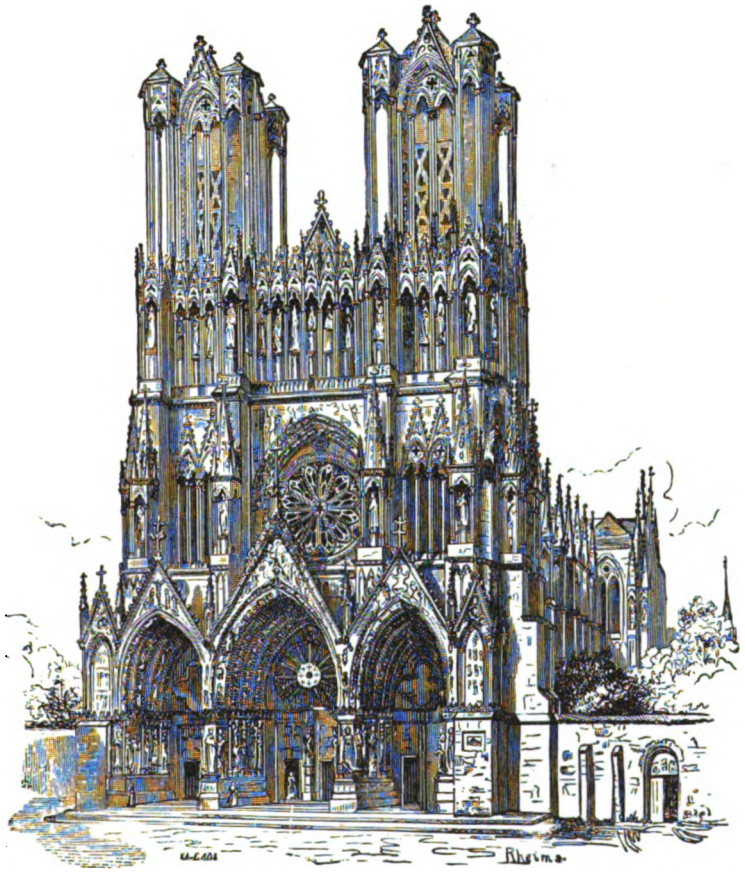


Fig. 364. Façade of the Cathedral of Reims.

choir, extremely rare in France. The vast Cathedral of Bourges, begun at this time, is an example of the same class. Its choir is not unlike that of Notre Dame in Paris, though larger; five little apses projecting from a double aisle, but the transept wholly wanting. The broad upper gallery of the Paris church has disappeared. The exterior of the chevet or rounded east end shows an advance upon that of Paris in unity and compactness of design.

With the beginning of the thirteenth century, the consequences of the movement previously started began to be more strictly defined; the system of the interior attained to its freest and clearest expression; and the superstructure acquired that airy lightness, that imposing boldness in its proportions, which henceforth necessarily gained for the Gothic style its supremacy throughout the Western world. The earliest of its productions, the Cathedral of Chartres—the choir and

Fig. 365. Interior of the Cathedral of Beauvais.

nave of which, after having been burned, were rebuilt with great celerity, and finished before 1240—shows a massive severity, reminding one of the Romanesque manner, especially in the formation of the windows and buttresses, as well as in the development of the choir. The effort after rich display in the choir is especially remarkable, although it does not yet attain to perfect clearness. The choir is surrounded by double aisles widened by three larger and four

Cathedral Church of Our Lady at Amiens (Somme) in France. The epoch is the same as that of Notre Dame in Paris. Amiens is considered the typical cathedral of the French Gothic style, having less charm than one or two others, but having nearly every feature of a great Gothic church in a perfect state of development. The sculpture of the west front is peculiarly precious.

AMIENS CATHEDRAL

smaller apsidal chapels which are still far from being grouped in a uniform series. But considerable progress is effected by raising the side aisles and by the bold elevation of the nave. The Cathedral of Reims—begun in 1212, and completed in the course of the century by Robert de Couci—is freer, bolder, and lighter; the choir attaining to a clearer development by being limited to a single aisle, from which radiate five chapels, still disposed in a semi-circle; and its façade, although weakened in effect by the unusual opening up of the two great towers by means of huge windows in their second architectural story (Fig. 364), offering the most splendid example of the perfect unfolding of the early Gothic idea.* But the Cathedral of Amiens (built from 1220-1288) is in itself a magnificent epitome of the results of all preceding experiments, carrying out, as it does, for the first time, the principle of the Gothic style in successful consistency, down to the last detail; and offering in its ground plan and superstructure a perfect model, destined to exert no unimportant influence upon the most considerable monuments of the West. The pillars in this structure had gradually acquired their slender, clustered form; the capitals were adorned with elegant foliage; the unwieldy upper galleries were done away with, but the triforia and windows fill their place with the utmost splendor; and in the ground plan of the choir, with its seven chapels, the polygonal design is carried out in a regular manner. While in this church the nave attains a height of 132 feet and a width of 42 feet, the Cathedral of Beauvais (Fig. 365), begun soon after, aimed in so daring a manner at surpassing all proportions hitherto successfully attempted, with its nave 45 feet wide by 146 feet high, that in 1284, only twelve years after its completion, the choir fell in, rendering a complete remodeling and restoration necessary. The system of the Gothic style was now firmly established, and was introduced everywhere with the most magnificent results. The reign of S. Louis, about the middle of the thirteenth century, was the epoch of the noblest and most perfect development of it; and the chapel erected by this king in his palace, now the Sainte Chapelle at Paris, (built by Peter of Montereau, 1243-51), is a faultless gem, showing the Gothic style in its highest development possible apart from the great complex plan out of which it had grown. This building consists of a three-aisled, cellar-like lower church, and a slender upper church without aisles which forms a single unbroken vaulted room rising to a height of more than 60 feet by 32 feet in width and 91 feet in length. The latter produces an enchanting effect by its graceful and noble proportions, its rich articulation, the broad windows

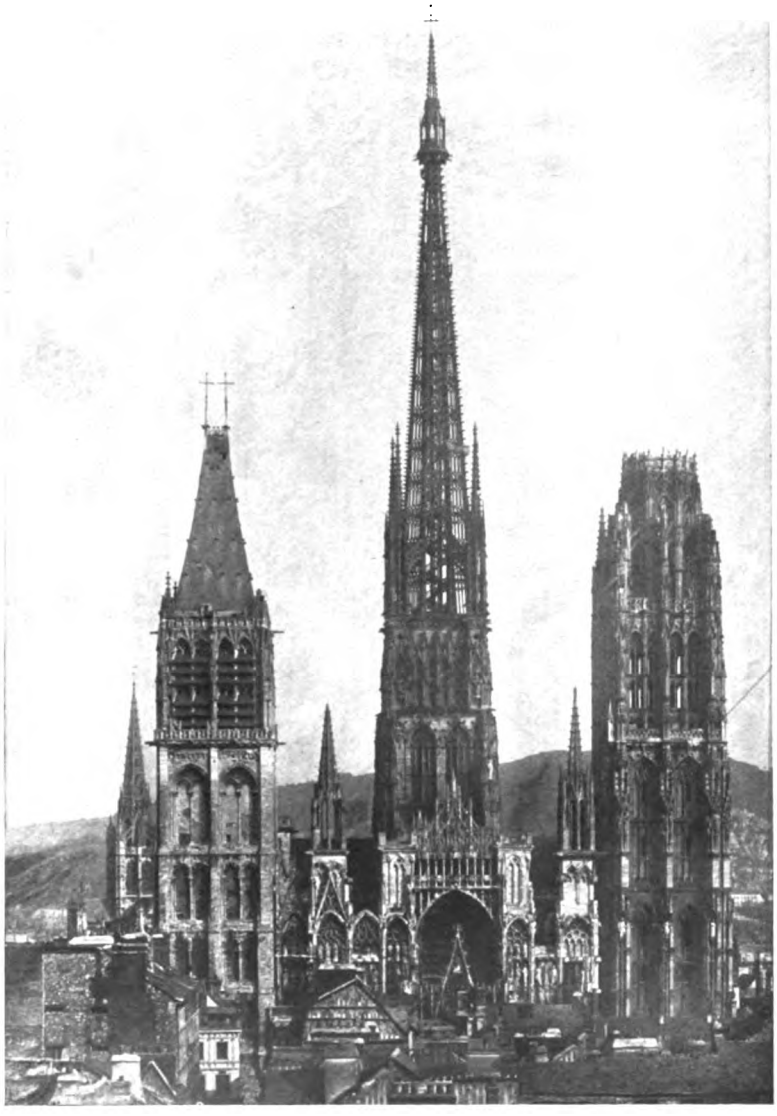
* The reader should note that these great cathedrals all, except Chartres, are without the spires which should complete the west front.

filled with stained glass which almost entirely dispose of the wall, and finally its gorgeous polychromatic decoration. Besides such structures, the architectural enthusiasm, which had now reached its high-

Fig. 366. Doorway, South Transept, Beauvais. (From Chapuy.)

est point, led to the splendid renovation of many of the cathedrals in other parts of France. The rebuilding of the Cathedral of Troyes was begun in 1208. In Normandy the vast Cathedral of Rouen was

West front of the Cathedral of Rouen (Seine Inférieure) Normandy, seen over the houses of the town. The very lofty spire is of cast iron and was built in the nineteenth century. The other towers of the front are remarkable, each in its own way, for that on the left (the north tower) is called the Tower of Saint Romain, or the Romanesque tower, from the early epoch of its lower stories; that on the right is called the Butter Tower (Tour de Beurre), from the tradition that money was raised for it by the sale of the privilege of eating butter during Lent. The distant steeple on the left is that of the Church of Saint Maclou, a beautiful church of the fifteenth century.



THE CATHEDRAL OF ROUEN.

constructed between 1200 and 1280. The Cathedral of Le Mans in Anjou received the addition of a superb choir, designed in the noblest Gothic, as a complement to its fine Romanesque nave. The smaller Cathedral of Tours was an elegant imitation of the Church of

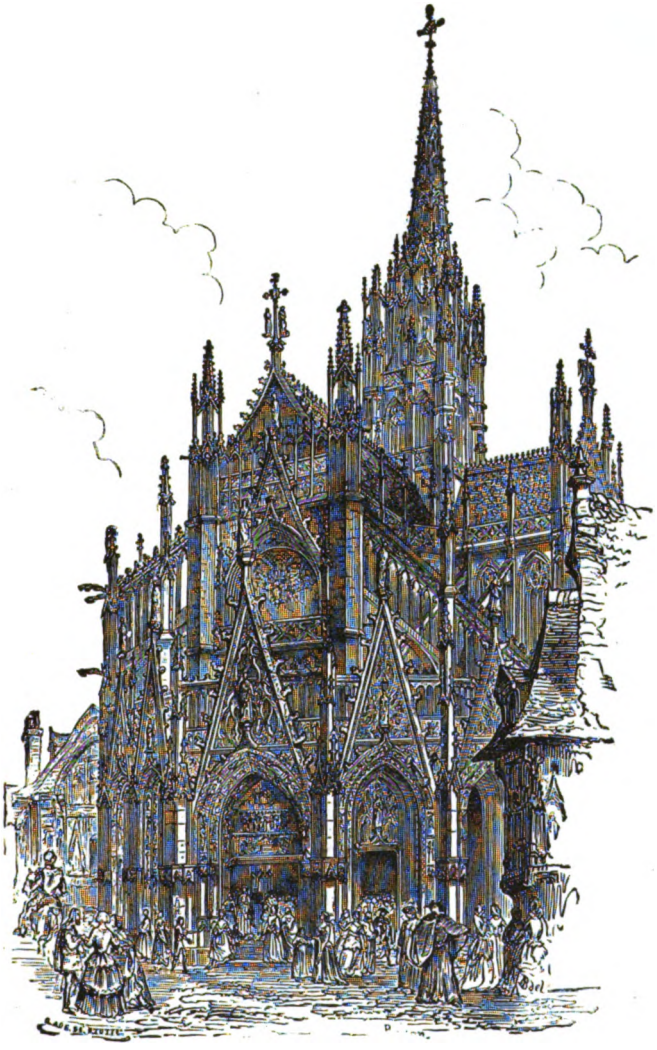


Fig. 367. Church of S. Maclou at Rouen.

Amiens. Farther south, this style was universally popular; and the Cathedrals at Auxerre, Lyons, Clermont-Ferrand, Limoges, and the choir of the Narbonne Cathedral bear witness to the almost undisputed sway which it henceforth exercised. In the French cantons of

West front of the Cathedral Church of Saint John
(Rhone), France. This flat and not very impressive fa
teresting on account of some very beautiful sculpture. It da
the fourteenth and fifteenth centuries, and is later than the
the church. This is remarkable on account of the unusual mi
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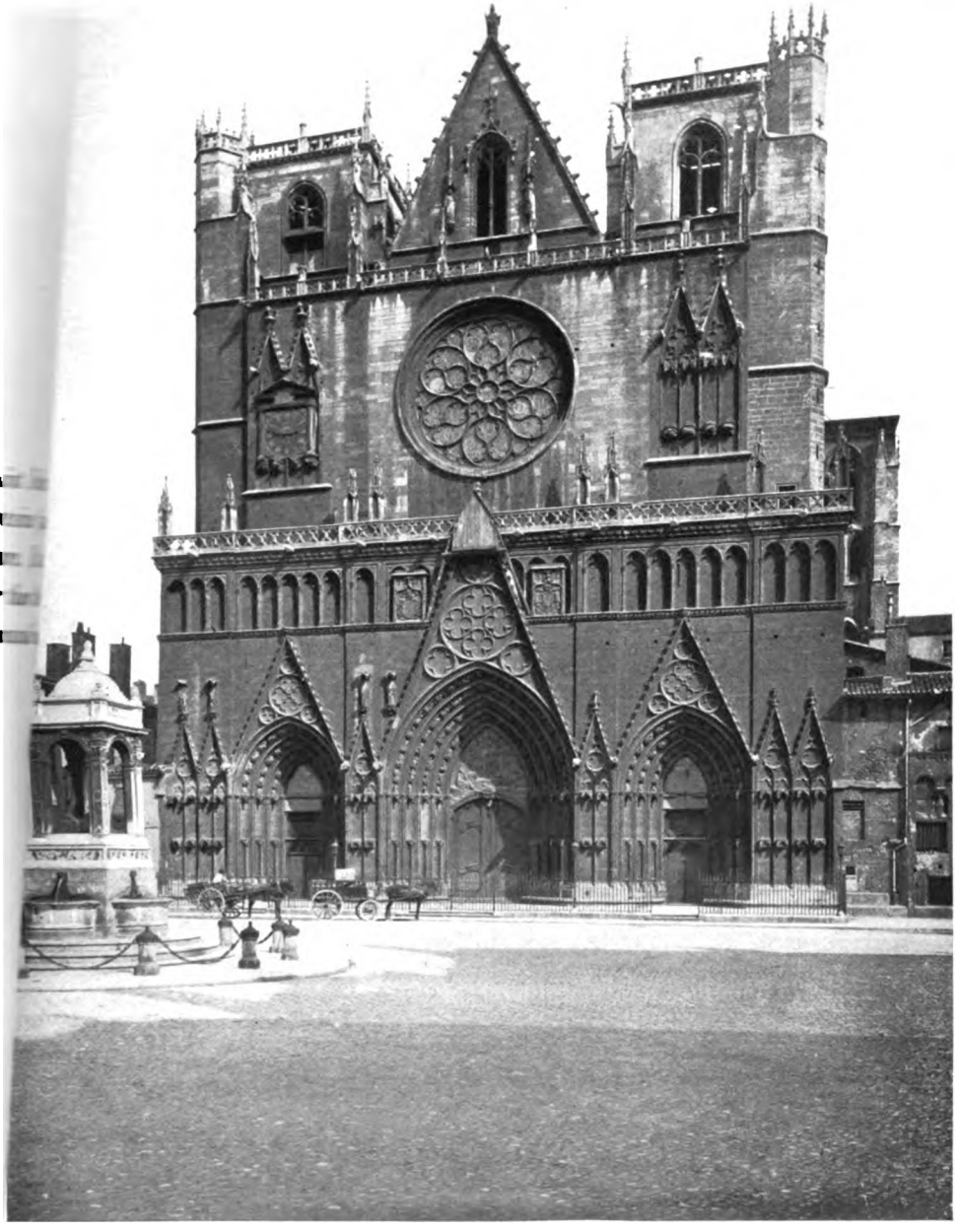


LYONS
THE CATHEDRAL OF ST. JEAN

Switzerland, its influence may be recognized in the Cathedral of Geneva; and even more markedly in the noble, severe, early Gothic Cathedral of Lausanne. Yet a simple ground plan, with a broad single-naved main structure and chapels built within the walls, still

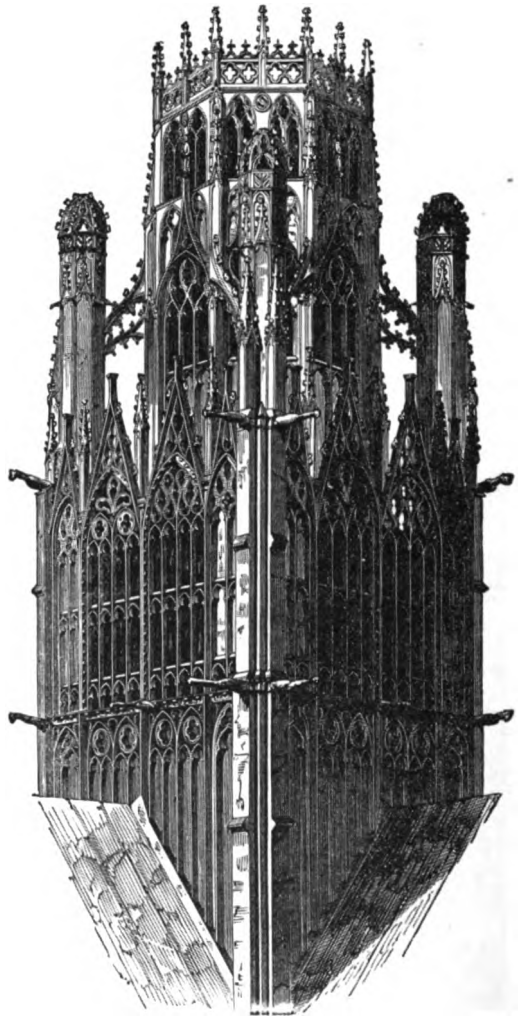
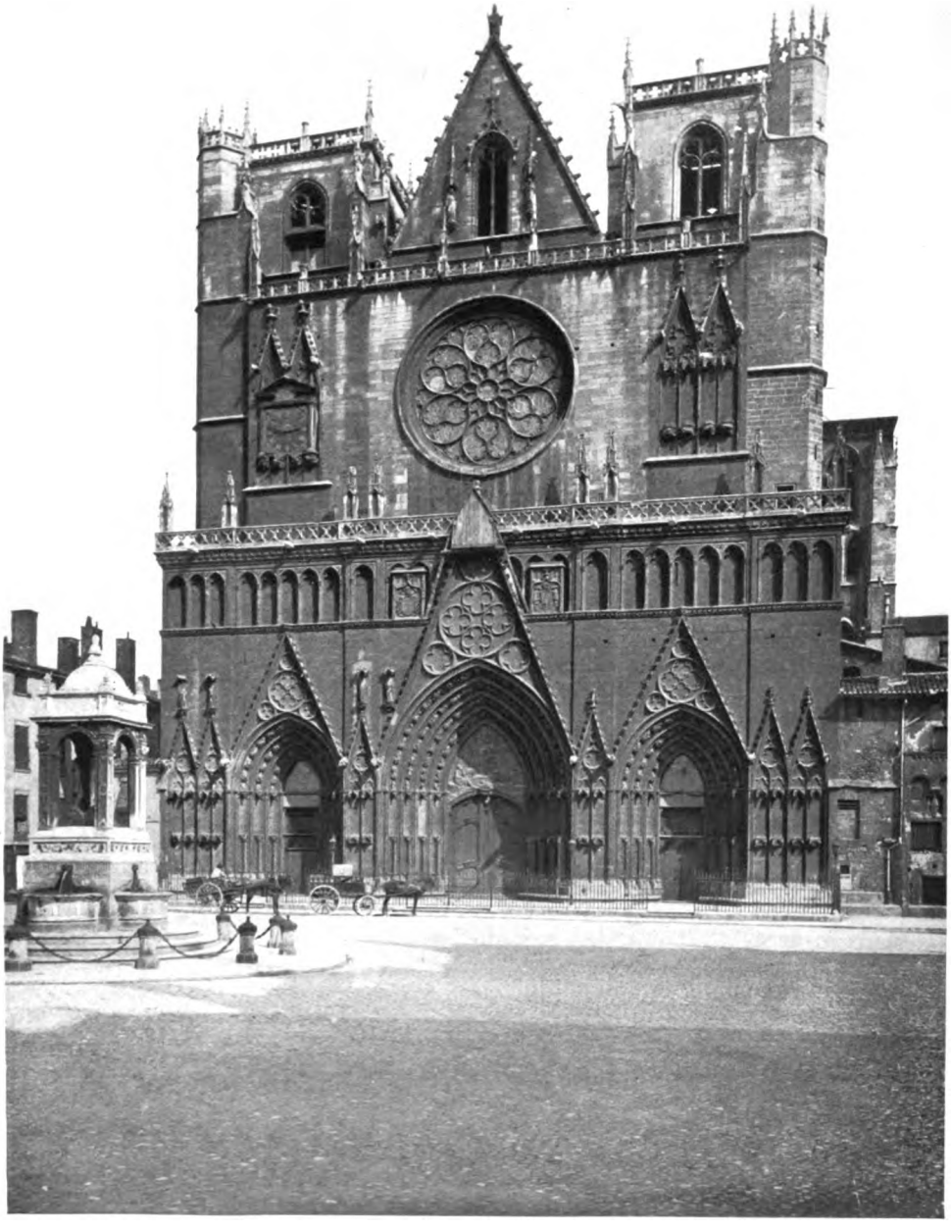


Fig. 368. Lantern, St. Ouen, Rouen. (From a print by Chapuy.)

held its own in rare cases in Southern France, as in the case of the magnificent Cathedral of Albi, begun in 1282, and slowly carried on till its completion, while the Cathedral of Poitiers and that of Carcassonne depart not less decidedly from French traditions, by

West front of the Cathedral Church of Saint John at Lyons (Rhone), France. This flat and not very impressive façade is interesting on account of some very beautiful sculpture. It dates from the fourteenth and fifteenth centuries, and is later than the body of the church. This is remarkable on account of the unusual mixture of Romanesque and Gothic art which characterizes it.



LYONS
THE CATHEDRAL OF ST. JEAN

having their three naves carried to nearly the same height, after the manner of the hall churches popular in Germany, and the termination of the likewise three-naved choir being rectilinear. The Cathedral of Poitiers has moreover its three aisles all of one width,

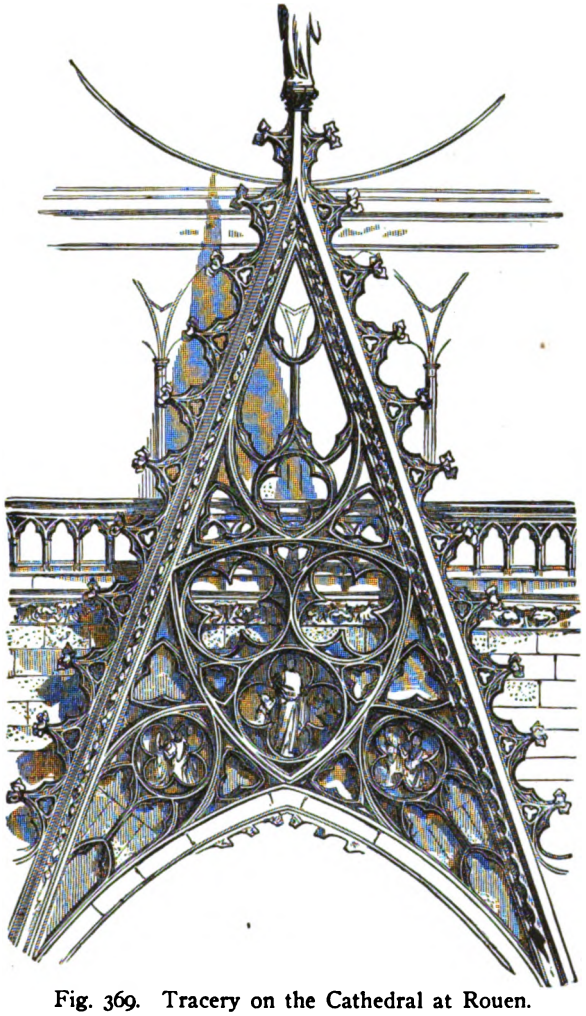


Fig. 369. Tracery on the Cathedral at Rouen.

and no transept other than on either flank a tower occupying a single square of the vaulting. A work quite unique of its kind is the Abbey of Mont S. Michel, in Normandy, towering upon a precipitous cliff on the seacoast, like a mightly citadel that reaches its climax in the boldly enthroned church.

During the fourteenth century, when the country was exhausted

and divided by the disastrous Hundred Years' War, a less rich development is observable in France; though even at that time there are instances of partial renovations and restorations of older structures. Not only are the older cathedrals (still in process of construction) completed, but the daring, almost exaggerated slenderness and airy elegance of the system, which had now attained to its final development, are most admirably illustrated in churches like S. Ouen at Rouen (Fig. 368) (begun in 1318), and the still unfinished S. Urbain at Troyes. After the beginning of the fifteenth century, a gorgeously rich aftergrowth of the Gothic began to unfold itself, designated by the French under the name of the Flamboyant style. This style delights in a preponderance of magnificent decoration, which goes hand in hand with a playful, fanciful treatment of the details. The tracery of the windows is particularly affected by this manner, being composed of flame-like curves. The arches also assume, in connection with tracery, or where they form window heads in civic architecture, an outward curve produced by an arc tangent to each curved side of the arch and producing a sharp upward point; an exuberance of splendid but somewhat lifeless tracery spreads itself over the exterior (Fig. 369). Normandy is particularly rich in unusually elegant productions of this style, among which S. Maclou at Rouen is conspicuous for the magnificence and richness of its execution (Fig. 367). This closing epoch is marked by a richer decorative construction in secular buildings and private houses. Of the splendid Hôtel de S. Paul, erected under Charles V., and of the still richer Hôtel de La Tremouille—both in Paris—nothing remains; and of the oldest residence of the French kings in the island where is now the Palais de Justice, only the glorious Sainte Chapelle, and the gloomy fortification towers looking out upon the river still exist. The Hôtel de Cluny at Paris is a fine mansion of the fifteenth century and the Palais de Justice at Rouen is a still larger and more stately building. As a magnificent princely stronghold of the Middle Ages, the castle of the Popes at Avignon survives, erected in 1336 and the following years, with two chapels and the imposing Hall of the Consistory, outwardly distinguished by massive towers, and now badly disfigured by its use as a barracks. The castle at Pierrefonds, likewise of the fourteenth century, recently restored by Viollet-le-Duc, is a stately edifice, and marks the highest development of mediæval military architecture. Even the castle of King René of Anjou, at Tarascon, dating from the fifteenth century, preserves the character of a mediæval fortified structure. Of the many other secular buildings* still extant, let us point

* Compare the splendid work by G. Eyries and P. Perret, "Les châteaux historiques de la France"; Paris, 1882.

out the Château Meillant, belonging to the closing epoch marked by its rich decorative display. The Palais de Justice at Rouen, and the house of Jacques Cœur at Bourges, are equally important civic buildings of the latest Gothic.

THE LOW COUNTRIES.

The provinces of the Low Countries, bounded by the great realms of France and Germany, present, as might be expected, a distinctly defined reflex of the influence and artistic position of these powerful neighbors in their architectural works. During the Romanesque epoch, when Germany was preëminent in Europe, the architecture of the Low Countries was marked by the predominating characteristics of the neighboring Rhineland; but when the influence of France became all-powerful during the Gothic era, this influence, in turn, was most strongly felt by the small states on the north; and henceforth the architecture of the Low Countries adopted the severe early Gothic style of France, and long continued in this primitive method.

The Cathedral of S. Gudule at Brussels, a building of impressive forms and grand proportions, belongs to the more notable edifices in what is now Belgium; as do also the Cathedral of Utrecht in the more northern kingdom, likewise executed on a French ground-plan, and the elegant choir of the Cathedral of Tournay, consecrated in 1318, whose slender proportions and lavish execution of the ground-plan with a surrounding aisle and five radiating chapels constitute a splendid termination to the likewise noteworthy Romanesque nave structure. The latter ranks with the great Rhenish monuments on account of its transept, which terminates in semicircles and is surrounded by passages, and because of its magnificent device of five towers, one on the intersection being flanked by two pairs on the arms of the transept. As belonging to the late era, we mention here the Cathedral of Antwerp, begun 1352, and only completed in the fifteenth century—this last a structure of grand and vast design, to which subsequent enlargement has added a main building with seven naves, quite unrivaled in the loveliness of its picturesque vistas. In Holland, this style, even in buildings of considerable design, is robbed of its richness by the employment of brick and by the frequent use of wooden roofs instead of stone vaults. Nevertheless, there are to be named, besides the Cathedral of Utrecht already mentioned, several stately churches, which followed the French choir plan, although keeping within reasonable limits; thus, the great church at Dordrecht, S. Stephen's at Nymwegen, the New Church at Amsterdam and the Church of S. Lawrence at Rotterdam, built since 1472. In other

churches, like S. Bavo's at Haarlem, S. Peter's, and the imposing Church of S. Pancras at Leyden, the great Church at Arnheim, the termination of the choir appears simplified by retaining the surrounding aisle, but dispensing with the chapels. Finally, a few hall churches occur, edifices with naves of equal height and mostly also of equal

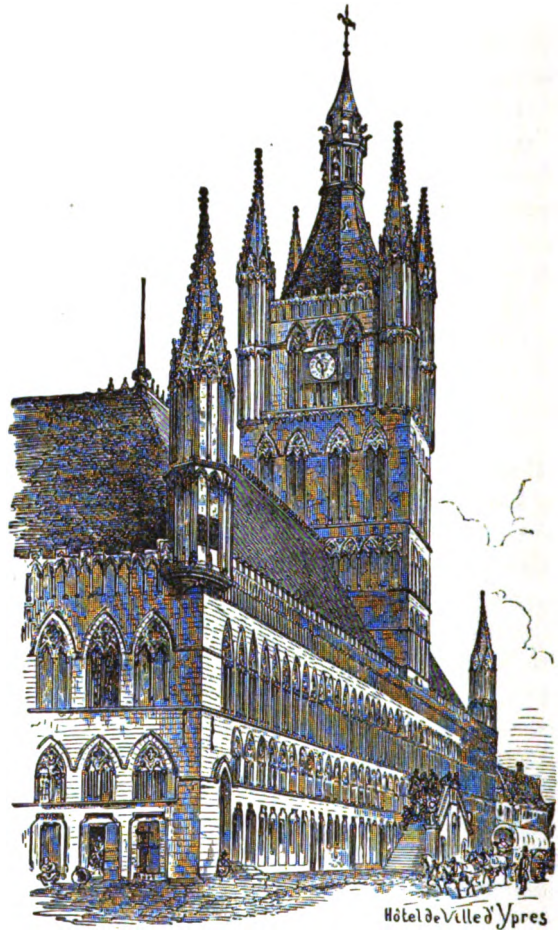
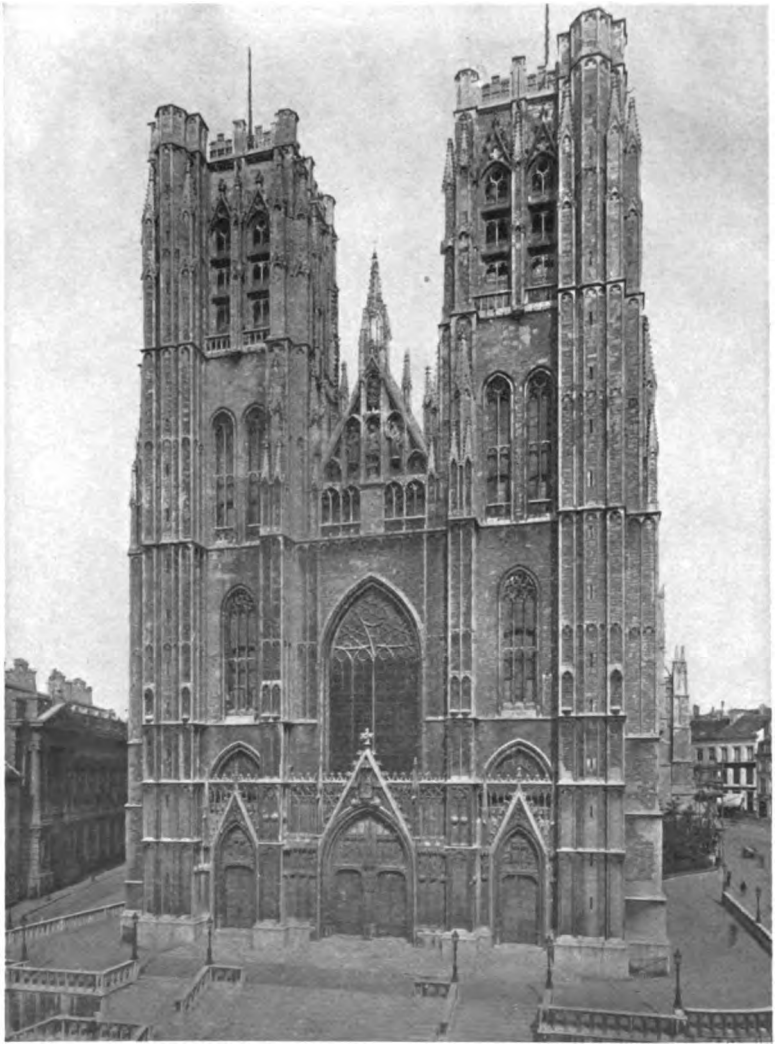


Fig. 370. Cloth Hall at Ypres. Ypern.

width, like the Lubenius Church at Deventer, S. James at Utrecht, and the Walpurgis Church at Zütphen, which has, moreover, a choir aisle of the same height and a ring of chapels. Of simpler design are the churches at Hasselt and S. Michael's at Zwolle, where, in order to avoid the weighty high roof, each aisle was provided with a sepa-

Cathedral Church of Saints Michael and Gudule at Brussels, in Belgium, generally called Eglise de Sainte Gudule. The church is of many different epochs. Thè greater part of the front shown in the picture is of the fourteenth century; the towers are extremely beautiful in proportion, and it is much to be regretted that they have never received their spires. The church is famous for its magnificent stained glass.



SAINT-GUDULE.

rate peaked roof, a disposition which is also found in Antwerp Cathedral and which recurs in the Prussian brick structures.

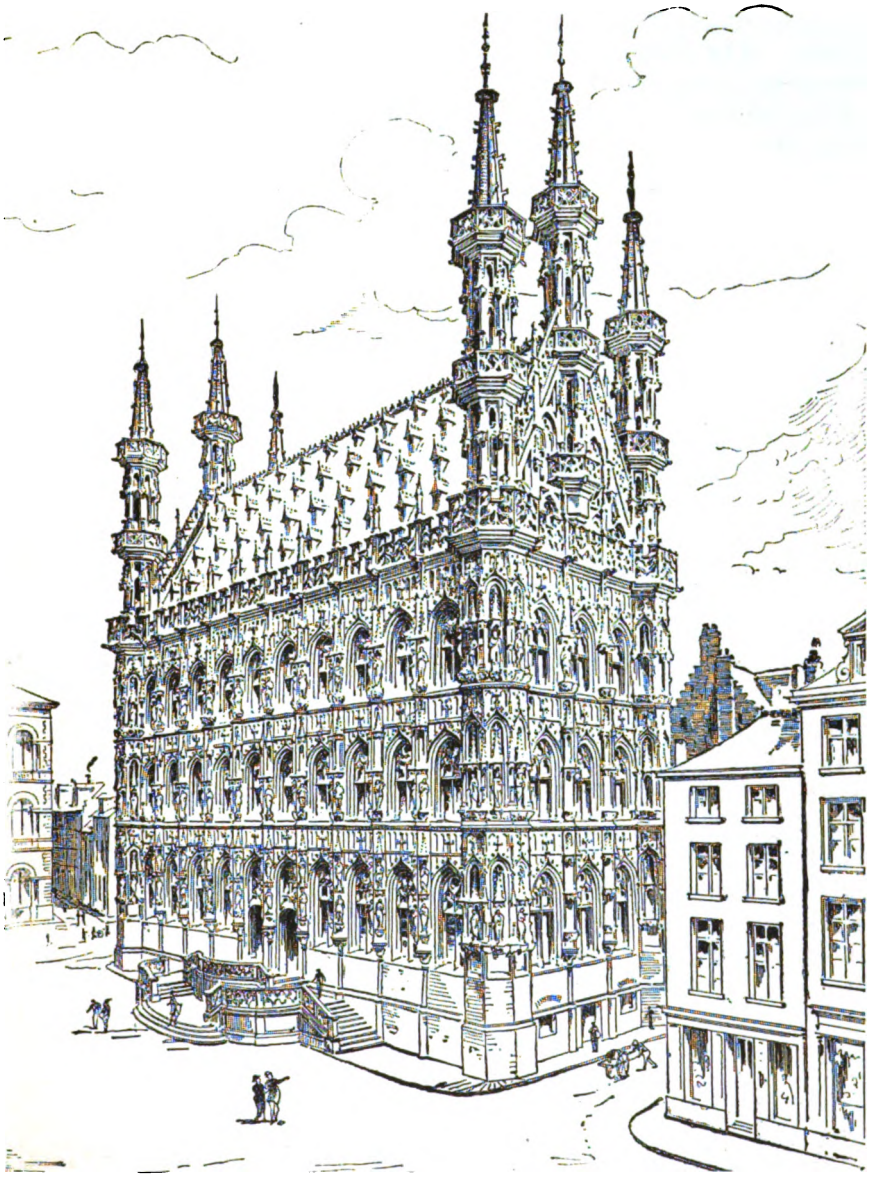


Fig. 371. Town Hall of Louvain.

Secular architecture in the Low Countries, especially in Belgium, had attained to great importance, resulting from the power and con-

sideration which had been acquired at that time by the Flemish cities through trade and commerce—a power only rivaled in all Europe by that of the great free cities of Italy. Burgher opulence and energy are grandly and vigorously expressed in the secular buildings of these towns. The design is often grand and spacious, far exceeding the actual requirements of the building. It borrows the essential features of its decoration from contemporaneous church edifices, but in such wise, that, in its employment and composition, the secular character is distinctly to be recognized. Thus arose not only town halls, but also guild halls, and various other structures for the public objects. Jutting turrets generally spring from the corners of the buildings; while the center is crowned, at Brussels and at Ypres, by a mighty tower, which in the case of Brussels is the *beffroi* (belfry). In other cities the beffroi stands usually alone, or is attached to another building, as at Bruges.

How large must have been the means at the disposal of the rich guilds of these mighty towns for such public buildings is proved, among other kindred structures, by the Hall of the Clothmakers at Ypres, built between 1200 and 1364, and now used as the Town Hall (Fig. 370). The building, of considerable dimensions, rises in two stories, with finely executed pointed-arch windows. It is surrounded by a rich cornice, and has turrets at the angles, while an immense square tower rises from the middle of its front and dominates the town. The Town Hall at Bruges is of fifteenth-century general design, though begun much earlier. It is a charming piece of graceful design with lofty pointed windows; but the Market House (Les Halles) to which is attached the famous Belfry, is small and plain. The town Hall at Courtrai is not dissimilar to that of Bruges. That of Ghent is a noble piece of transition work, in which the latest Gothic seems about to relinquish its most noticeable feature—the pointed arch. Of all these civic buildings the superb Town Hall of Louvain is the chief in varied beauty (Fig. 371); and that of Oudenarde, studied from it, but with a tower added as if in imitation of Brussels, is almost equally fine (Fig. 372).

GERMANY.

At first, Germany appears to have set her face against the Gothic style more strenuously than most other countries. Her adherence to the traditional Romanesque permitted only a very gradual recognition of the excellences of an architectural method which had sprung up on a foreign soil; indeed, this recognition did not take place until the

new manner, through the so-called Transition style, began, as we have seen, to exercise a modifying influence upon architectural productions. Even then, for a long while, the Gothic appears only in isolated cases; while the Romanesque tradition retains its power until late in the

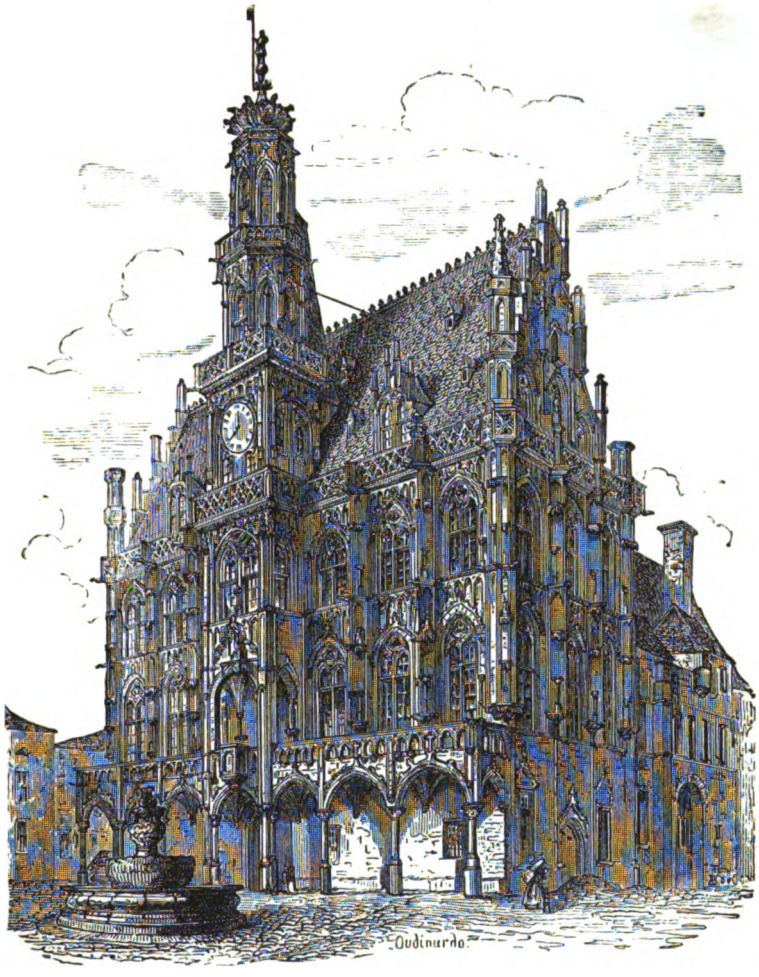


Fig. 372. Town Hall at Oudenarde.

thirteenth century, producing at that late day a series of its most notable works.

That the Germans were conscious of the foreign origin of this style, we shall see when considering the collegiate church at Wimpfen; but even in the earliest structures we recognize the effort not to yield unconditionally to French traditions, but to defer to national customs

by an independent reconstruction of the style. The resplendent beauty of the French cathedrals with their increased upward tendency, the walls almost entirely dissolved into radiant windows, but especially

Fig. 373. Interior of Church of Holy Cross at Gmünd, in Württemberg.

their richly developed choir plan with surrounding aisle and complete ring of chapels, was indeed so tempting to the German masters of that time that they bore witness to their admiration in a series of im-

Cathedral Church of Notre Dame at Antwerp in Belgium, seen from the northwest and having in the foreground the magnificent tower, 1500-1510, *which is not only the highest in Belgium, but one of the highest in Europe, measuring* 407 *feet* 6 *inches from the pavement to the top of the stone finial. The church is very large in plan and is almost unique in Europe in having seven aisles, that is to say, three aisles on either side of the nave.*

THE CATHEDRAL OF ANTWERP.

posing monuments, among which the Cathedral of Cologne stands foremost. At the same time, however, a counter-current made itself felt, which may be thought consciously national. It found expression, primarily, in a lessening of the upward tendency, but especially in a simplification of the choir plan, thus forming a link with the traditions of the Romanesque epoch. The ring of chapels and the surrounding aisle were rejected, and a simple polygonal termination of the choir was deemed sufficient even in such stupendous edifices as the Minster at Ulm, in Württemberg; or three parallel polygonal terminations were adopted, as in the case of S. Stephen's Cathedral at Vienna, when the transept also was generally dispensed with. The abandonment in part of the high nave and its clear story, although that was a Romanesque feature as well, and the preference for quite or nearly the same height for each of the three naves. This form of church, called the "hall church" or "hall building" (Hallenkirche or Hallenbau), which we have already found in Westphalia during the Romanesque epoch, lacks indeed the brilliant effects, the rich gradation and distribution; there is in it something more simple, calm, almost domestic. But for this very reason it expresses the spirit of mediæval city life with surprising clearness, and often with great beauty of proportion; and during the latter stages of that epoch it attained to ever-increasing popularity in all parts of Germany. If, on the one hand, the clear story of an elevated central nave with its rows of windows was dispensed with; on the other hand, stress was laid upon uniformly lighted spaces of about the same width and height, illuminated by the high windows of the outer walls. On the exterior, the simplification was not infrequently carried to baldness, and especially the broad and high roof which covered the three naves together was cumbersome and clumsy in effect (Fig. 374). On the other hand, it may be claimed that by the removal of the complicated buttress system the external appearance gained much in simplicity of design, and retained a certain gravity more in accordance with other styles of architecture than the complete Gothic of France admitted.

This simplest form, however, was only the starting-point. The feeling of power in the cities and the emulation in brilliant enterprises produced a counter-current, from which resulted a superb enhancement of the ground-plan of the hall church. Again the rich French choir plan was reverted to, by adding to the polygonally closed choir a surrounding aisle of equal height and with a complete ring of chapels. Yet the single chapels were not extended into polygons, but presented themselves outwardly as a second, mostly lower, surrounding aisle, from which only the buttress piers with their plain surfaces projected. Often the buttresses received a richer organization by

tracery and finial crownings, sometimes also by statues, and the broad roofs are partly hidden by galleries. There is no doubt that the Ger-

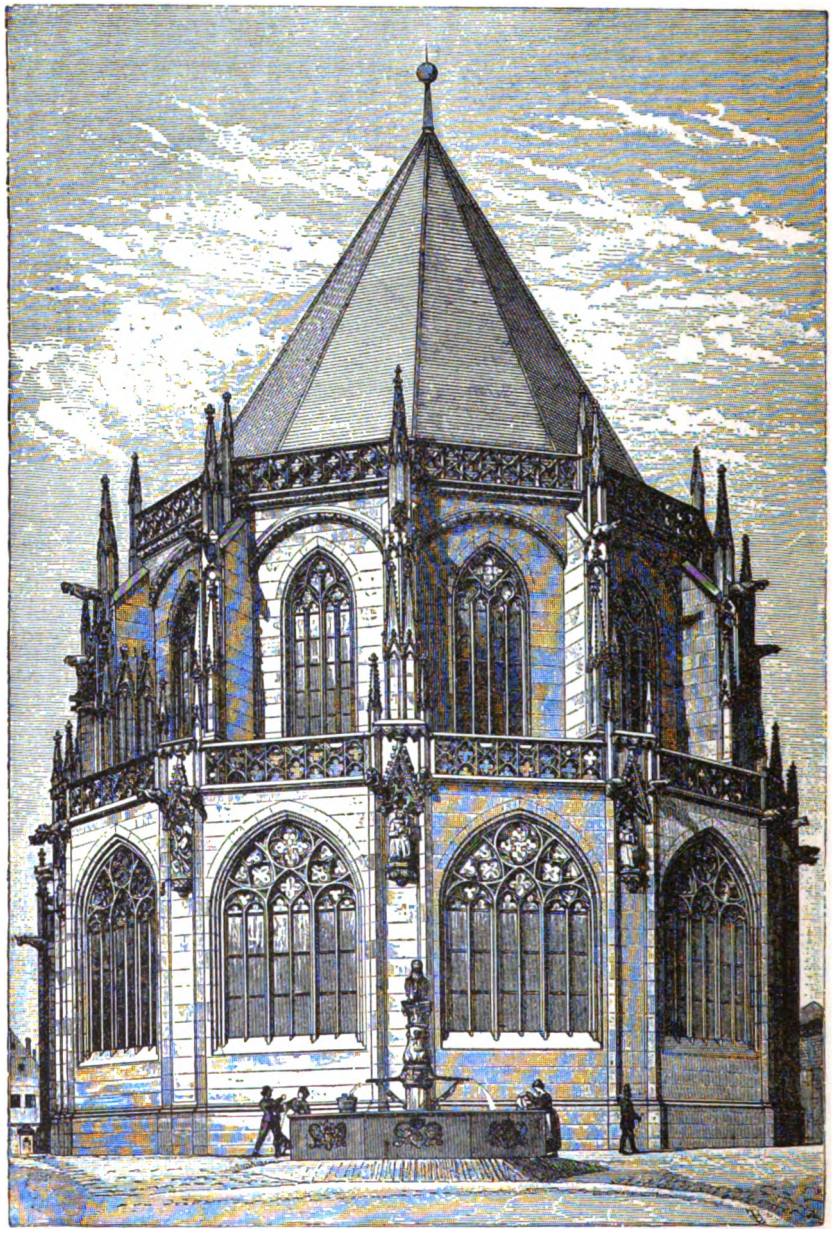
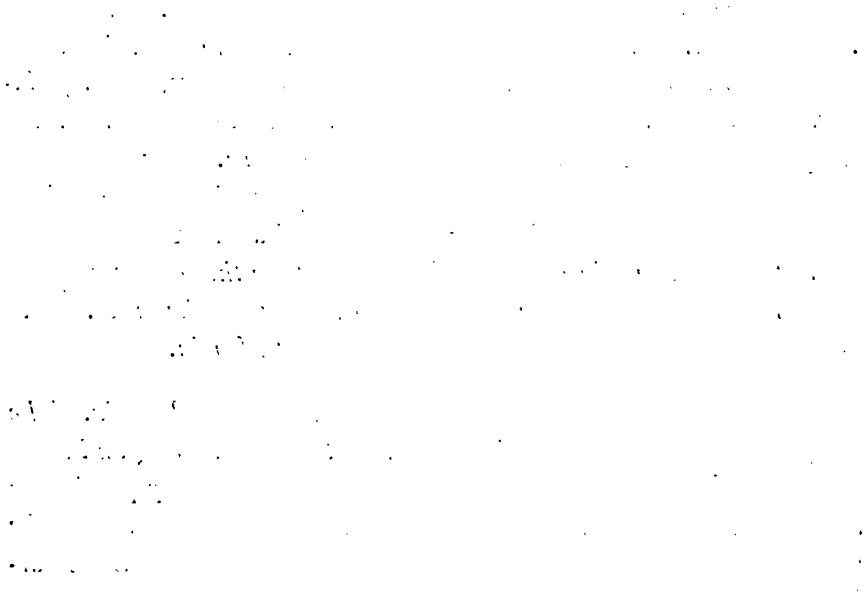
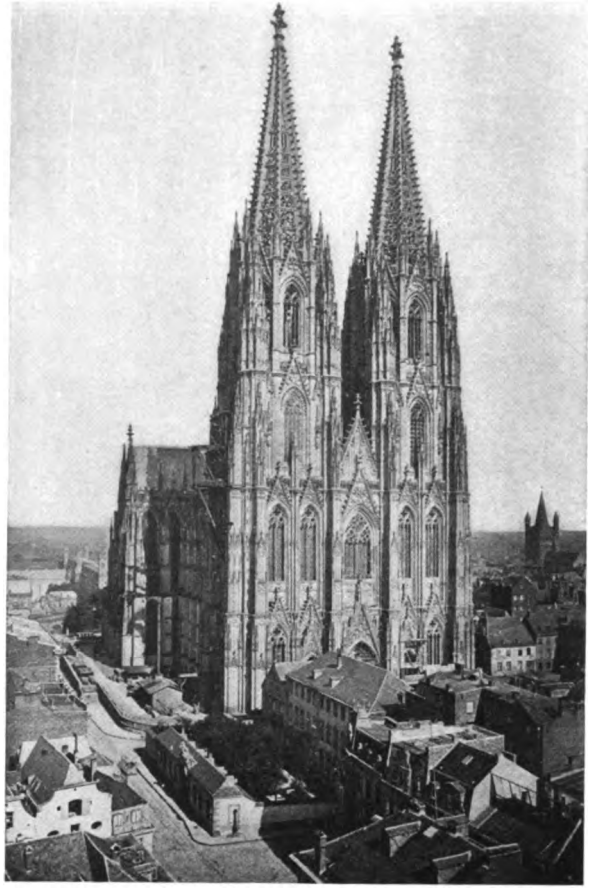


Fig. 374. Choir of Church of the Holy Cross at Gmünd, in Württemberg. (Baldinger.)



The Cathedral at Cologne in West Prussia, Germany. View from the southwest. The building, which is larger than any Gothic church in the north except Amiens, which it closely resembles, was left incomplete during the Middle Ages, and all that we see above the third story of windows in the towers is entirely modern. Great national subscriptions were raised and the work was patronized by the kings of Prussia, so that the building was completed about 1860 with the highest Gothic spires in Europe (higher even than that of Strasburg), rising to 511 feet from the pavement to the top of the cross. The church at the right is the one called Gross Sanct Martin.

The Rathaus or Town House at Cologne in Rhenish Prussia. The octagonal tower is the oldest important part of the building and dates from the fifteenth century. The very beautiful two-story portico on the right dates from the middle of the sixteenth century. All the buildings shown in the picture front on the street called the Old Market (Alter Markt).



COLOGNE

CATHEDRAL RATHAUS

man Gothic produced in these works its most characteristic creations. It was preëminently in South Germany that this form was cultivated.

The choir of the Dom at Magdeburg, in Prussian Saxony, begun in 1208—which exhibits the polygonal termination of the choir, with its surrounding aisle, and series of chapels, after the French model, still interwoven throughout, however, with Romanesque details—is among the very first buildings which betray a tendency to the Gothic style in Germany. The main structure of this church belongs to the fourteenth century; and the façade with its two stately towers was finished only in 1520. Unique in character is the Church of the Virgin at Treves, in Rhenish Prussia (Liebfrauenkirche), built between 1227 and 1244, in which reappears the old round-church plan with the high nave used as the central mass, as in the Romanesque churches at Ravenna (S. Vital) and Aix-la-Chapelle (the Minster). This ancient plan, formerly regarded with so much favor, receives new life from the Gothic system, and especially from the spirited application of the French wreath of chapels. It is much to be regretted that no further attempts were made in this direction. Not less original, but richer in results, is the impress of the same tendency on the Church of St. Elizabeth at Marburg, in Hesse-Nassau (1235-83), which, in the construction of choir and transept, goes back to the older Rhenish design of a termination at the east end in three great apses, extending to the east, north, and south, and offers in the main structure a notable example of the first Gothic hall church, with three naves of equal height.

In its famous masterpiece, the Cathedral at Cologne (commenced in 1248), the German Gothic adheres more unconditionally to French models; so that the entire choir, with its aisle, and ring of chapels, is almost identical with the Cathedral at Amiens. But in the details the coldness of the fourteenth century and of later imitative work is too evident—a fault resulting from the slow carrying out of the work. After the consecration of the choir in 1322, the builders gradually advanced toward the completion of the transept and main building; in the design of the latter, with its five naves, again reaching almost the highest development of spacious and grandiose building. The central nave rises to a height of 145 feet, with a breadth of 44 feet: the highest Gothic nave except Beauvais and Milan, 153 feet each, and Amiens, 147 feet; and probably the fourth highest interior in Europe, if S. Peter's Church at Rome be taken as 148 feet high to the crown of the vault. The total exterior length of the vast building is 544 feet. The whole was to have been finished with two colossal towers, with slender open-work spires. These remained unfinished; but the original drawing of the design discovered in modern times

encouraged the Prussian authorities. The work was undertaken anew, and completed about 1880. These great towers are 511 feet high to the top of the terminal crosses; and are therefore the highest stone structures in the world except the plain obelisk in Washington City.

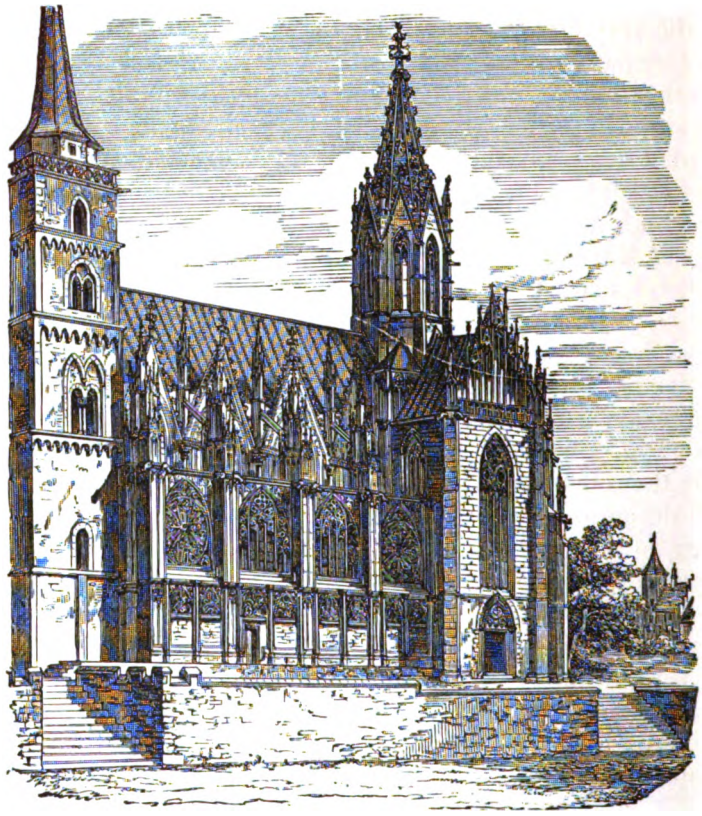
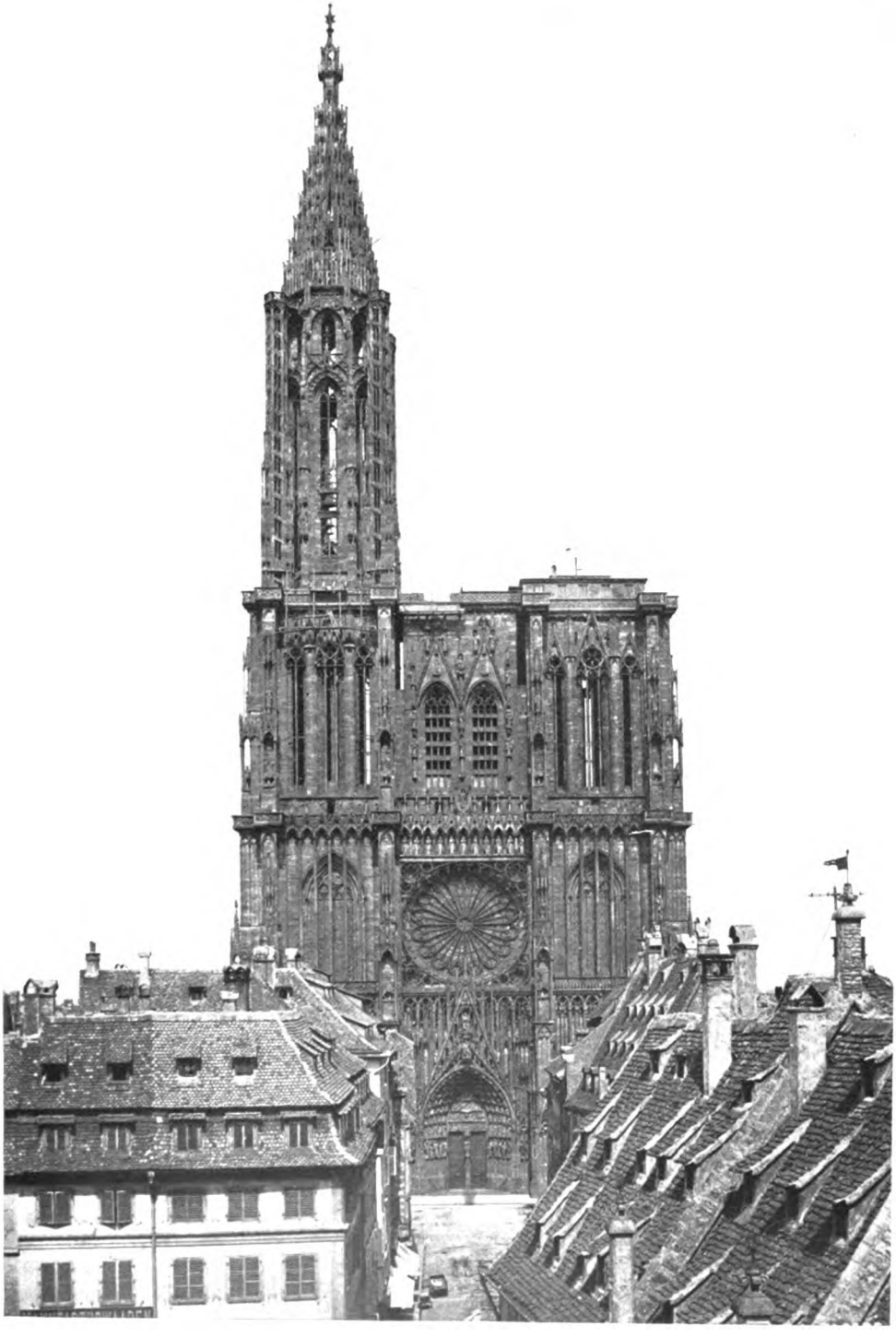


Fig. 375. The Church of S. Katharine at Oppenheim.

Farther up the Middle Rhine, the Church of S. Katharine at Oppenheim* (1262-1317) is a far more original monument, and especially remarkable for a splendidly ornamented exterior (Fig. 375). In the course of the thirteenth century the nave of the Cathedral at Freiburg in Breisgau, in the duchy of Baden, was erected; a somewhat heavy structure, though its west tower, which projects from the façade, is the noblest specimen extant, as it was the first instance, of a fretted, open-work spire. The Minster at Strassburg, too, exhibits a certain

* F. H. Müller, "Die Katherinenkirche zu Oppenheim"; Darmstadt, 1823. A splendid work in folio.

Cathedral of Strasburg in Elsas (Alsace), formerly in France, but annexed to Germany in 1871. *The magnificent tower is the highest ancient Gothic structure, rising* 465 *feet from the pavement to the top of the finial. The spire, built about the middle of the fifteenth century, is remarkable as not at all affecting the appearance of a roof. Even as in Antwerp a series of pinnacles replaces the sloping surface of such a roof, in Strasburg a series of inclined bars of stone carry a forest of very small pinnacles. The whole is, as a design, entirely unique. The church is not very large, and is of much earlier date than the great west front shown in the picture, and which, except the spire, is of the early part of the fourteenth century.*



STRASSBURG

THE CATHEDRAL

grave severity of proportion in its enormously broad and splendidly finished nave, completed in 1275; but preserves an admirable specimen of the amalgamation of the German and French methods in its façade, begun in 1277 by the architect Erwin von Steinbach. The gloriously beautiful wheel window, 42 feet broad, as well as the sharp accentuation of the horizontal members, belongs to the French school; while the German tendency is expressed in the particularly well-defined arrangement of the bold plan of the double tower; though only the north spire—soaring to a height of 465 feet from the ground, together with the somewhat lawless and playful sculptured decoration of a later epoch—was completed by Johann Hültz of Cologne in the year 1439, after Ulrich von Ensingen had previously supervised the erection of the façade. More in the spirit of the French school—after the manner of the Cologne Cathedral, yet with the choir plan simplified—the Cathedral of Metz in Lorraine, with its slender, splendidly finished nave, is in the main a work of the fourteenth century; while the noble Church of S. Vincent, in the same city, maintains the more austere character of the early period, and in its choir design, with side choirs, conforms to the ground-plan customary in Germany. It is significant that in Alsace, as well as in Lorraine, the German arrangement in the treatment of the ground-plan prevails exclusively. Especially attractive examples are in Alsace, the Minster at Schlettstadt, near Strassburg, exhibiting the noble forms of the early period and a most attractive scheme of vaulting; the collegiate church at Weissenburg, in the extreme north, distinguished also by exquisite cloisters; the simpler church of St. Martin at Colmar, with beautifully sculptured portals; and, of the later era, the Church of S. Theobald at Thann, which has most graceful towers with open-work spires. The same noble and severe early Gothic style is represented by the Collegiate Church at Wimpfen im Thal, on the Neckar, with its exquisitely finished transept. Retaining the Romanesque façade with the two towers, it was erected from 1259 to 1278 on a simplified ground plan, but with the choir towers effected in South Germany. The structure is of a more general significance from the standpoint of art history, inasmuch as a contemporaneous account emphasizes its erection in "French style," reporting that it was built by an architect from Paris, "opere francigeno." On the other hand, the choir of the still unfinished Cathedral at Prague, in Bohemia, begun in 1343 by Matthias von Arras, and continued by Peter of Gmünd in 1385, displays an entire return to the French ground-plan. Also the Romanesque nave of the Cathedral at Augsburg, in Bavaria, was endowed with a choir of stately design similarly treated. In Switzerland we must give prominence above all

to the two towers of the noble Minster at Basle, with their open-work spires; to the Minster at Freiburg in the Uechtland, which still clings to severe traditions; to the lofty Minster at Berne, a work of the Suabian school of architecture; and finally, to the graceful Church of St. Oswald at Zug, the last two being of the late Gothic period.

The greater number of the structures we have named, though their foundation dates back to the thirteenth century, were, owing to their great size not completed before the following century, or, in some cases, even later. Altogether, Germany in the fourteenth century experienced a renewal of her golden age of art. Indeed, for the second time she stood forth a leading spirit in the artistic world, and through the influence of her architecture, which had now completely passed into the flesh and blood of her national life—while that of most of the provinces of France was greatly retarded in its national development and its foreign expansion by the invasion of the royal domain by the English and Burgundian rulers—German architecture influenced nearly the whole European world, even to Italy and Spain. The beginning of the nave of the Cathedral of Halberstadt, in Prussian Saxony, dates back to the thirteenth century, though its choir—which retains the surrounding aisle, but rejects all the chapels excepting one on the eastern side—was added only after 1327. However, the structure as a whole remains one of the finest possible examples of the massive and well-proportioned yet exquisitely developed German Gothic. The five-naved Minster at Ulm, in Württemberg, commenced in 1377, is one of the most imposing designs among South German structures; its somewhat bare proportions being counterbalanced by its vast dimensions. The unfinished tower was to have tapered into a bold open-work spire. Next to the choir two smaller towers were erected in accordance with a system popular in South Germany and capable of great effectiveness; their harmonious completion is due to the modern architect of the Minster, about 1830.

Besides these great church edifices, all those monastic structures, like cloisters, chapter houses, refectories are to be considered, in which a particularly original development of the style is often noticeable. Out of the great number of such works we may instance the lofty early Gothic cloisters of the Cathedral at Treves, and of St. Emmeran's at Ratisbon, in Bavaria; the cloisters of the monastery at Maulbronn, in Württemberg, dating from different epochs; the cloister and chapter hall at Bebenhausen, near Tübingen in Württemberg; and the picturesque late Gothic structure of the cloister of the Minster at Basle.

A degeneracy in the nobler type of architectural conception, from this time onward, must be attributed, more than to any other cause,

to the preponderance of the burgher element in society. Architecture acquires a somewhat mechanical expression. The details are not free from a certain arbitrary and artificial treatment; for instance, the

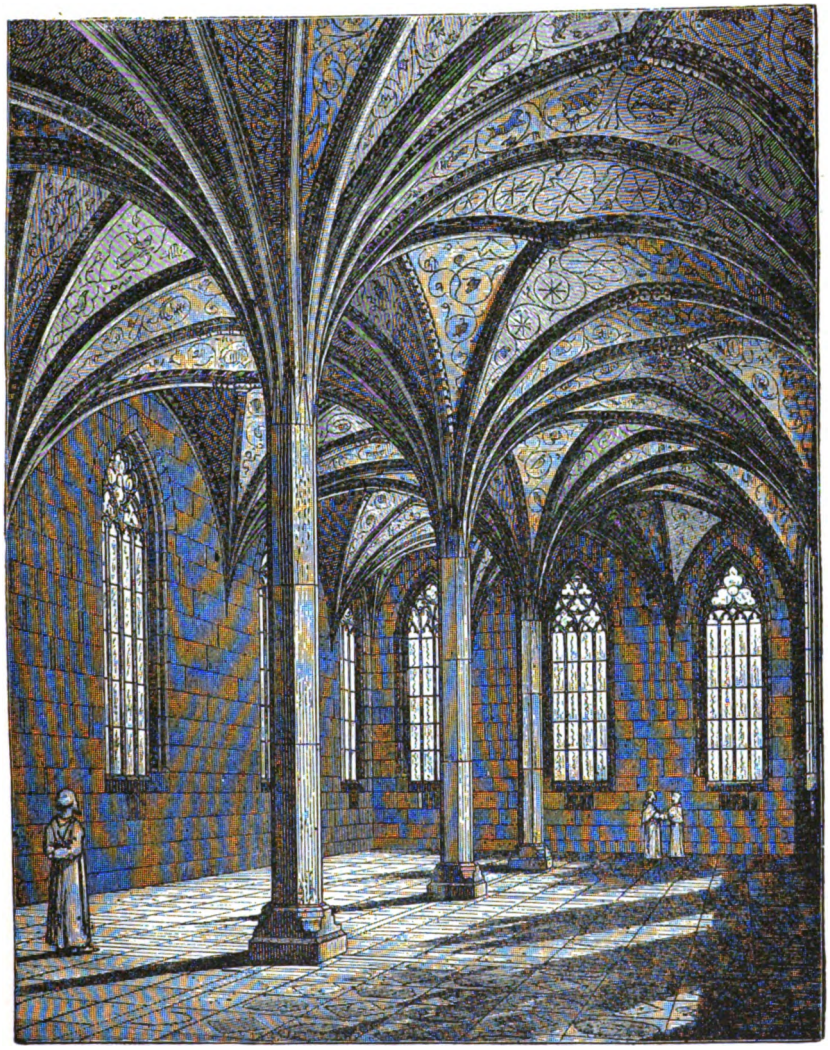


Fig. 376. Chapter Hall at Bebenhausen. (Baldinger.)

playful forms of stars and net-work noticeable in the vaulting are solecisms in architecture, and diminish the dignity of the building with which they are associated. In the tracery of the windows, the so-called vesica piscis form prevails; while, on the other hand, the

division of the pillars is less strict. Sometimes, indeed, the capital is altogether omitted; and the moldings of the pillar, branching out on every side, radiate immediately into the ribbed vaulting (compare Fig. 376). The dimensions, however, are usually considerable, though the more refined beauty of proportion may be lacking—a

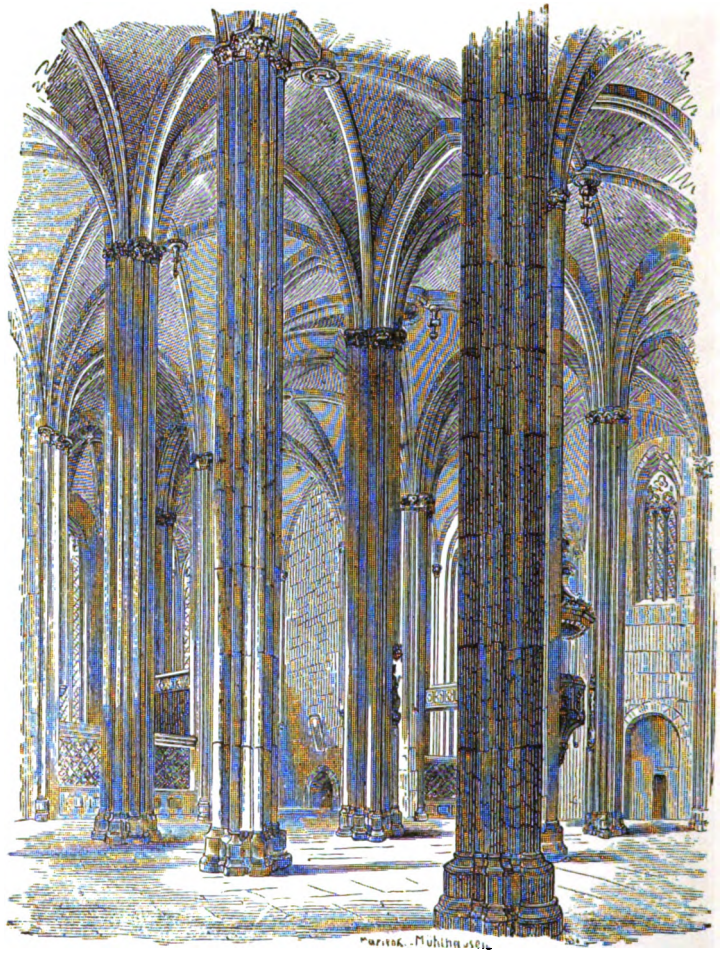


Fig. 377. Interior of the Church of S. Mary at Mühlhausen.

want which is made good by the lavish wealth of detail; portals and pulpits, tabernacles and lecterns, being often ornamented with an admirable exuberance of fancy. The preponderance of that far balder form of the hall church in which the ground-plan was either square or rectangular, and undivided by aisles, which form came

more and more constantly into use in Germany after the fourteenth century, had its origin in the same cause. The principal seat of this style is in Westphalia, where the Liebfrauenkirche and the Church of S. Lambert at Münster, the Wiesenkirche at Soest, the five-aisled Church of S. Mary at Mühlhausen (Fig. 377), and the Cathedrals of Minden and of Meissen, in Saxony, the former entirely built in the thirteenth century, are noble specimens of this architectural form. There are only isolated instances of hall churches in South Germany. One of the most elegant examples, the Church of Our Lady at Esslingen, in Württemberg, is remarkable for richly decorated gates and an exquisitely graceful open-work spire (Fig. 378). The Church of the Holy Cross in Gmünd, mentioned above, is a structure of slender elegance and beauty of proportion, and rich in plastic decoration. The Church of Our Lady (Frauenkirche) in Nuremberg (built from 1355 to 1361) is particularly interesting on account of its rich façade. In the same town, S. Sebald has a choir which, in its surrounding aisle of equal height, displays an imposing example of this hall design as applied to a polygonal ground-plan; and the Choir of S. Lawrence (1439-77) follows the same model. The nave of

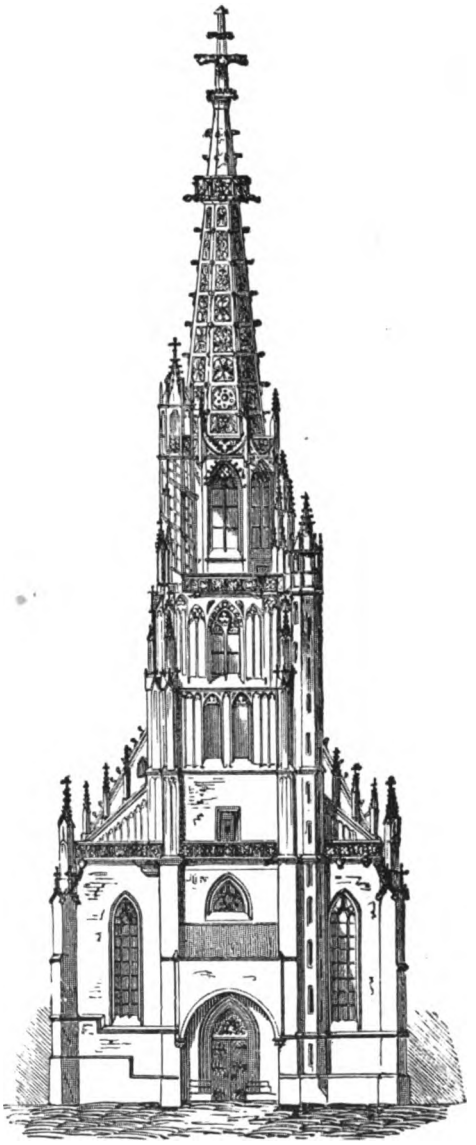


Fig. 378. Church of Our Lady at Esslingen.

this latter church is a noble production of the thirteenth century, with a façade remarkable for a superb wheel window, and a portal decorated with unusual lavishness. In the Church of S. Stephen at Vienna, one of the grandest specimens of German Gothic architecture, the hall plan is still retained, although the middle nave is somewhat higher than the sides, without rising into a clear story, and therefore windowless. The choir, begun in the fourteenth century, exhibits, on the contrary, three naves of exactly equal height, ending in polygonal apses. On the exterior, however, the clumsiness of the colossal roof is modified by singularly beautiful side gables with pierced tracery (Fig. 379); while in the giant tower, soaring, pyramid-like, 435 feet into the air, we behold one of the most superb masterpieces of Gothic architecture. This structure was completed in 1433.

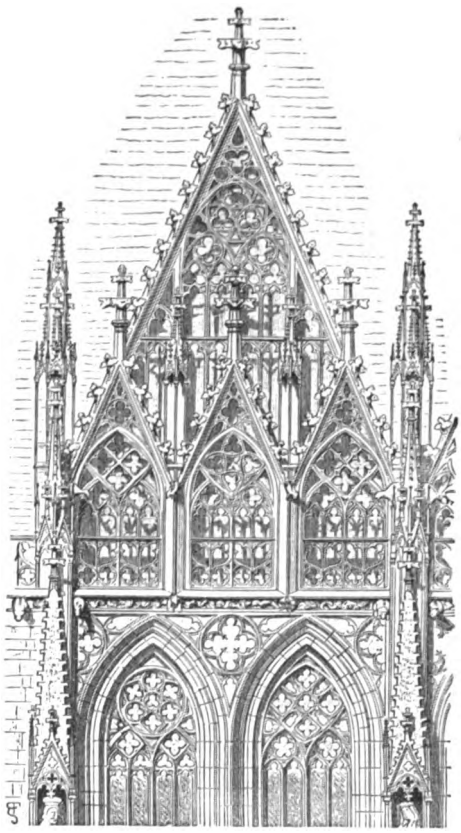


Fig. 379. Gable from the flank of the Church of S. Stephen at Vienna.

The last period, beginning with the fifteenth century, shows a considerable number of specimens of the hall form, in the Saxon provinces particularly. The churches of this class are mostly of a light and spacious appearance, soaring upward freely and boldly, but in the execution of details already infected with all the degeneracy of this half-insipid, half-fantastic period. A restless winding, twisting, curving and intersecting of parts is observable, and may be set down as a specimen of true Gothic pedantry — as in the case of the north portal of the Cathedral at Merseburg, in Prussian Saxony, near Halle, whose nave was consecrated in 1517. Another eccentricity, not less barbarous, occurs in cases where architecture so far forgets

itself in crude realism that it loses sight of the ideal laws of construction upon which all its power rests, and slavishly imitates the exact shapes of trees and branches in stone, combined with all manner of fantastic monstrosities. This is noticeable on the gate of the Conventual Church at Chemnitz, in the kingdom of Saxony, southwest of Dresden, which belongs to this closing epoch. The Church of SS. Peter and Paul at Görlitz, in Prussian Silesia (1423-97), is particularly light, bold and free. The Church of the Virgin, or Market Church, at Halle, in Prussian Saxony, on the Saale (built as late as 1530-54), and many of the same kind, may be mentioned as among the edifices of this period.

In the provinces of the North German coast a quite special modification of the Gothic may be observed in the case of brick structures,* which, departing in no wise from their earlier traditions, still expressed a certain individuality by means of robust and massive designs and strong piers, as well as by a rich and elegant surface decoration. Taking them as a whole, the earlier structures are without doubt more complete from a technical point of view, as well as more thorough and solid; while after the middle of the fourteenth century, and still more decidedly after the beginning of the fifteenth, a growing rudeness in the style of the whole keeps pace with a luxuriantly rich surface ornament. It is worthy of remark that these structures remain unplastered both without and within, showing the unadorned, grave, strongly effective color of the brick.

A few churches follow up the plan of the lofty nave, and even have the richly constructed French termination of the choir, save that the buttress system is noticeably simplified, and the splendid ground-plan is likewise essentially modified. The Church of S. Mary at Lübeck on the Baltic (begun 1276), a structure of grand proportions and severe gravity of construction, is decidedly the masterpiece of this school. Of kindred style is the Church of the Cistercians at Doberan, in Mecklenburg-Schwerin, near Rostock, completed in 1368, noble in its execution, with an elegant lightness of effect. The Cathedral at Schwerin is of much the same type as this last, only more grandly massive in its effect; nor are the vast Churches of S. Mary of the neighboring cities of Rostock and Wismar less so. The same conception finds an outgrowth in Pomerania also, in several considerable monuments; as, for instance, S. Mary's Church at Stargard, in Pomerania, near Stettin, and another at Stralsund on the Baltic (completed in 1460). A simplified system of the same style is exhibited by the Cathedral at Havelberg, in the Prussian province of Branden-

* "Denkmäler der Kunst," plate 56.

burg, as well as the Cathedral at Breslau, in Silesia—restored in its older parts—and S. Elizabeth's Church in the same place.

The number of hall-formed churches is far greater in which a splendid effect is reached, especially in more recent times, by means of

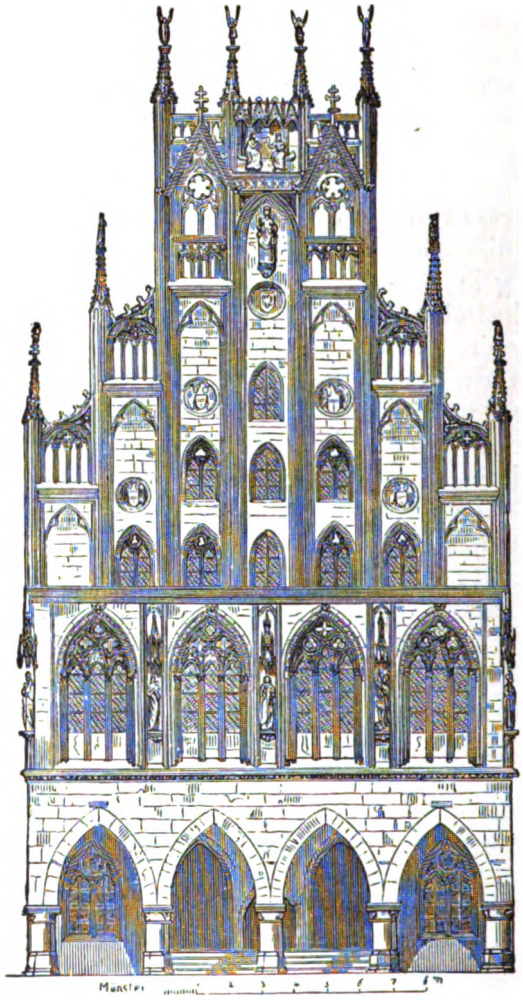


Fig. 380. Town Hall at Münster.

rich surface decorations, with colored glazed tiles in the most elegant patterns. This style appears in singularly rich and yet noble forms in S. Mary's Church at Prenzlau, in Brandenburg (1325-40), and is finely and harmoniously displayed in the Cathedral and S. Mary's Church at Stendal, in Prussian Saxony; while it attains giant propor-

tions in S. Mary's at Colberg, in Pomerania, and is grander still, though without any effect of detail, in the mighty Church of S. Mary at Danzig, on the Baltic—a contrast to the last-named being presented by the lavish development of gorgeous surface decoration in S. Katharine's at Brandenburg, begun in 1401 by Master Heinrich Brunsberg of Stettin. Although the Cathedral at Königsberg, almost at the extreme northeastern border of German lands, has a more lofty nave, it must be classed among hall churches, because the nave, like that of S. Stephen's at Vienna, has no clear story windows. Finally, South Germany can boast of brick structures of the same order, re-

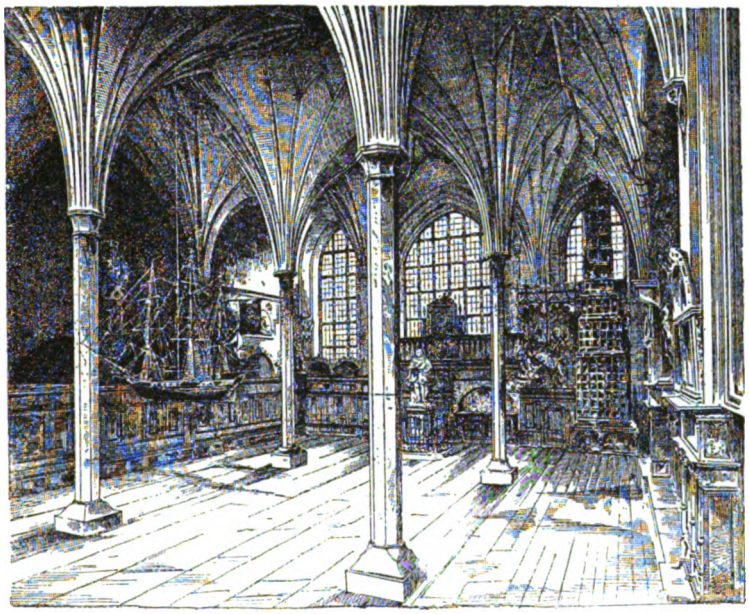


Fig. 381. Hall of the Artushof at Danzig.

markable for their vast proportions, as the Church of Our Lady (the Cathedral) at Munich (1468-88), and the Church of S. Martin at Landshut, in Bavaria, finished in 1473.

In Germany, buildings for secular purposes are not constructed on so grand or so splendid a scale as in the Flemish towns; but they are not lacking in variety and often nobility of form. Some stately town halls are good specimens of building in hewn stone. The Hall at Brunswick, near Hanover, especially, is remarkable for its original design and graceful two-storied arcades; while the Hall at Münster, in Westphalia (Fig. 380), has a gable rising in slender proportions, well designed, and adorned with windows and statues. Noteworthy

private residences may be found at Münster, at Kuttenberg, in Bohemia, and at Nuremberg, where the Nassau House is noticeable for its simple design and elegant hexagonal angle turrets. Among the castles, that of Karlstein in Bohemia, built by Charles V., and the grandly planned Albrechtsburg at Meissen, in Saxony, are prominent. The elegant Town Hall at Wernigerode, in Prussian Saxony, is a specimen of those frame structures of wood, of spirited execution, many of which exist of this epoch in North Germany.

The progress made by secular architecture in the regions where brick was used—that is, in the flat country of Central Prussia—is considerable. Tangermünde possesses one of the most sumptuous council houses extant, with a richly pierced and ornate gable; while Stendal can boast, in its Uenglinger Tower, of a town gate that unites a certain graceful elegance with spirited construction and bold strength. The secular edifices in the Prussian provinces formerly belonging to the Teutonic knights are the most magnificent of all. The Artushof in Danzig, the ancient assembly hall of its merchant-princes, belongs to the most admirable structures of this class. The vaulted roof is supported by slender columns of granite, its ribs expanding on every side like palm-leaves, giving an elegant fan-like shape to the vaults—a favorite style in the Prussian houses of this Order (Fig. 381). This architecture achieves its greatest triumph in the chief seat of the Teutonic Order, the proud Castle of Marienburg, near Danzig, which united in its central structure the residence of the grand-master, with its superb offices, the refectory of the order, and other subordinate buildings of great variety in their design, in a complete whole as grand as it was artistic.

ENGLAND AND SCANDINAVIA.

For the second time, England received a new style of architecture from France; but she now understood, even better than on the first occasion, how to mold it to an independent characteristic expression; so that the English Gothic offers a sharply defined contrast to that of the Continent. The design of the ground-plan now undergoes an essential simplification, not only in the fact that the main building never has more than three naves (to compensate for which, however, it has an unusual length), but in the plan of the choir, which goes back to very sober and moderate proportions. Not content with an almost entire rejection of surrounding aisles, and ring of chapels, the choir, as well as the aisles, usually terminates rather tamely in a straight wall; only receiving as an addition on the eastern side the Lady Chapel, but not enriched by it. Added to this, the choir is fre-

The Cathedral (Christ Church) at Canterbury (Kent), England. The view, taken from the southwest, shows a curious arrangement of two transepts, an eastern and a western, the latter being the principal transept in that the great central tower is built over the crossing of this with the nave, while the eastern transept flanks the choir of the church. The central tower is of beautiful design and dates from 1495-1517.

CANTERBURY CATHEDRAL

quently of equal length with the nave; so that the whole structure stretches out to a great length, only somewhat interrupted by the two transepts, which are now often retained. Thence it happens that the comparative height of these buildings is singularly unimpressive, and that the cross-vaulting of the roof often springs from corbels on the wall either below or above the triforia, without any connection with vaulting shafts; so that the vertical development can only be regarded as subordinate. The Cathedrals of Wells (Fig. 382) and

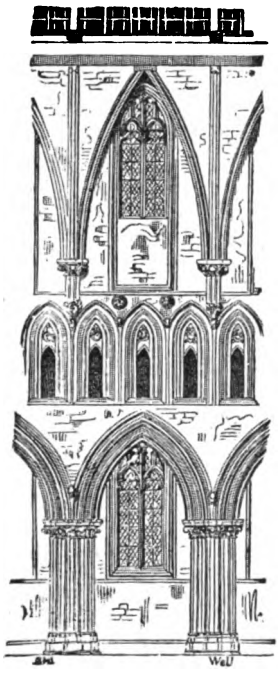


Fig. 382. Interior System of Wells Cathedral.

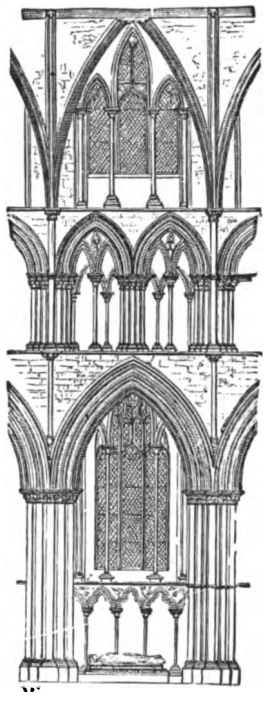


Fig. 383. Interior System of Worcester Cathedral.

of Worcester (Fig. 383) offer examples of this arrangement: the first in quite a disconnected composition; the last with an attempt to bring about at least an apparent connection of the supports of the vaulting with the arcades. In this fact we again perceive that English disinclination, more decidedly evinced during the earlier periods, for the vaulted structure; which, even at this epoch, is not apprehended in its full organic consistency. The exterior likewise experiences a kindred simplification; for the buttress system is confined to cases of unavoidable necessity, and the flying buttress especially is often dis-

pensed with. Hence a severe horizontalism of outline preponderates here as well, being brought out still more decidedly, in later years, by the low roof, hidden from sight behind the lofty battlements. As a rule, two stately towers spring from the façade, with the usual addition of a third massive tower over the great square where the transept intersects the nave; but even these towers very frequently were

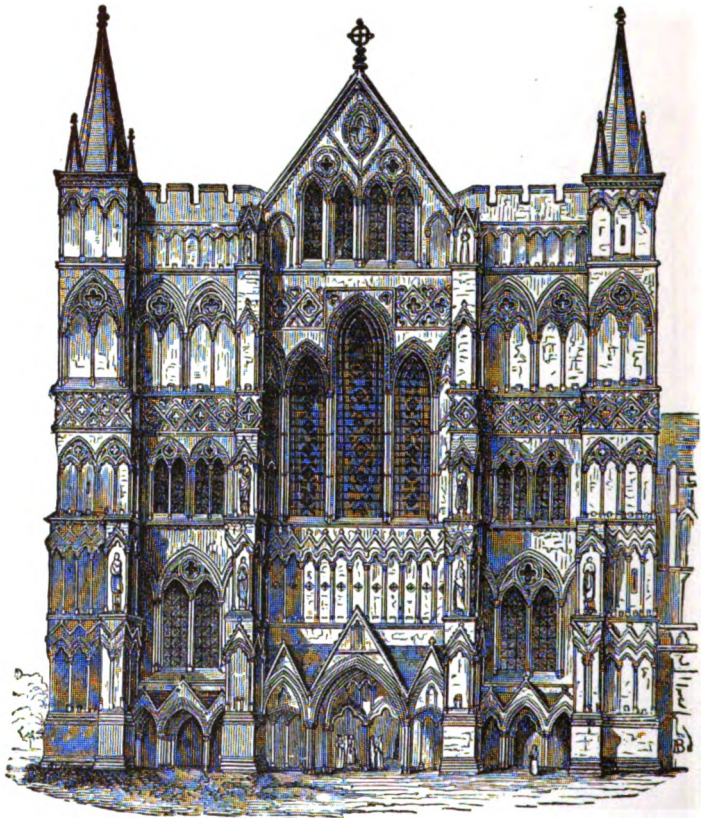


Fig. 384. Façade of the Cathedral of Salisbury.

left without tapering spires, being generally finished with battlements, and with small turrets or large pinnacles at the angles.

The first introduction of the Gothic style in England took place in 1174, when a French architect, William of Sens, was called upon to carry out the restoration of the Cathedral at Canterbury after its destruction by fire. The semicircular termination of the choir, together with the surrounding aisle, and the construction and organization of the whole structure, no less than its details, correspond, for the most

Westminster Abbey in London, seen from the northwest. The towers of the west front are not of the original church; they were built by Sir Christopher Wren in the seventeenth century and are not Gothic in a strict sense. The flank and east end of the church are of great interest, but the interior is what is most important, and the church is especially famous as containing the tombs of very many of the most famous Englishmen.

WESTMINSTER ABBEY
FROM A PHOTOGRAPH

part, with the early Gothic, just then prevalent in Northern France, though still with some intermixture of the Romanesque style. In the course of the next century, Westminster Abbey in London, the choir of which dates from 1245-69, is the only work, except Canterbury (although the Romanesque plan of Norwick is of this character) originally built on the model of the French-cathedral design, with its polygonal choir, surrounding aisle, and circle of chapels, to which is added a fully organized system of buttresses. For the rest, England soon generally adopted the new principle, with such specific modifications, however, that her people, not without reason, have given the name of Early English to the style of their architectural monuments of the thirteenth century. Starting with the common ground-plan described above, this style developed a severe simplicity in the fundamental forms, which, however, reveal in the details a rich capacity for life. Since the piers stand without any apparent structural connection with the vaulted roof, even when there is vaulting, they resolve themselves, as it were, into a sheaf of slender shafts, which often loosely encircle the central pier. The moldings of the arches of the arcades correspond to these clustered columns in the richness and variety of their profiles. Above the arches of the nave there is always a triforium, consisting either of separate lancet arches, or of groups of lancet arches separated by slender columns. As a rule, the windows do not yet contain Gothic geometric tracery, but are usually narrow and lanceolate, and arranged in groups of two or three together. The simple cross-vaultings of the nave rest upon short columns supported by corbels projecting from the clear story wall, and only occasionally carried down to the arches of the nave, though even then without any structural connection with the piers (consult Figs. 382, 383).

The Cathedral of Salisbury belongs to the most important structures of this epoch (1220-50), being perfectly sustained and consistent throughout—a noble and graceful building, a pure and clear expression of the English style, particularly in the design of its choir, together with a second transept, and the exquisite Lady Chapel, projecting, in part, within the building. The façade, flanked by two slim towers of no superior height, is constructed with special care and thoughtfulness of design (Fig. 384). The proportions of the whole church are remarkable for English architecture; for, with a total length of 430 feet, the middle nave is only 33 feet wide and 75 feet high. The Minster of Beverly, in the eastern part of Yorkshire, exhibits the same treatment, and a consistent execution in the style of the early English Gothic; as does also the choir of Worcester Cathedral (dedicated 1218), with clustered columns, groups of lancet windows, plain triforia, and cross-vaulted roof, the nave having been

added subsequently. In equally strict accordance with this primitive style are the long main building and transept of Wells Cathedral, erected from 1214 to 1239; and the broad and powerful façade

Fig. 385. Cathedral at Lichfield.

(1242), with its two towers and unusually rich sculpture; while the choir was added in the fourteenth century. To this epoch, likewise, must be assigned the choir of Ely Cathedral, built from 1235 to

Cathedral Church of Lincoln (Lincolnshire), England. The view, taken from the southwest, shows the splendid central tower built over the crossing of the transept and nave, and also the extraordinary west front with an enormous portal arch about 80 feet high and flanked by walls richly adorned with arcading. Lincoln Cathedral is famous for the beauty of its Gothic sculpture. The alternation of large and small pinnacles on the south transept points to a peculiar system of vaulting within. Although many epochs, from the eleventh to the fourteenth century are represented in the work, the greater part is of perfect thirteenth century Gothic.

LINCOLN CATHEDRAL

1252. The great octagon above the square of this cathedral, begun in 1322, exhibits a motive which recalls Italian domed structures; though in this case the stone vaulting is copied in wood, resulting in a structure, which would have been impossible to a race of builders to whom the Gothic style was native, or made really their own. Next in importance stands Lincoln Cathedral, with its mighty structure, 524 feet in exterior length, likewise completed in the thirteenth century. Finally, this style is splendidly developed in the Cathedral of Lichfield (Fig. 385), its main structure and transept belonging to this epoch, while the eastern portion is of later date. Its two west towers, and the great tower at the intersection of the nave and transept, have remarkably high, slender spires.

The fourteenth century sees in English architecture that richer treatment, aiming at a splendid effect in details, noticeable everywhere at this period, and leading in England to the so-called *decorated style*. This tendency finds expression especially in the adoption of a lavish, if not altogether consistently developed geometric tracery in the windows, as well as in the elegant star and net-work vaulting constantly employed. Among the finest productions of this era, the Cathedral of Exeter stands preëminent; its chief portions, constructed on one design, having been built from 1327 to 1369. Exquisitely organized clustered piers, rich tracery in the windows (Fig. 386), and elegant star vaulting, with an unusual completeness of the buttress system on the exterior, combine to give the whole structure an impress of spirited grace. Nor is the Cathedral of York less important (Fig. 387), its choir falling in the first and its main building in the second half of the fourteenth century—a building of splendid appearance and grand design. The Abbey Church of Melrose, in Scotland, on the Tweed, now a picturesque ruin, represents the same stages of development; while the nave of Winchester Cathedral, rebuilt in 1393, with its slender piers of spirited construction, its blind gallery taking the place of the triforium, and the rich net-work vaultings, indicate the transition to the following epoch.

Toward 1370, this architectural style passes completely into the *perpendicular style*, which had taken shape in the buildings of Gloucester Cathedral twenty years before. This, in its increasing opulence, adopts an element of fanciful geometric work, leading to a lattice-like perpendicular bar-work in the tracery of the windows, and generally spinning a net of such tracery over all available surfaces. Somewhere about 1400 there came into use the so-called Tudor Arch, a flattened type of arch struck from four centers; pointed, and even in some cases curved upward at the crown with the reverse curve called the accolade; and the arches of arcades and

vaultings are covered in a fantastic fashion with a profuse decoration of pointed and scalloped work. The vaulted roofs grow much lower in pitch and flatter in curve, and the ornamentation of the arch structure goes so far with heavy pendants hanging down like stalactites

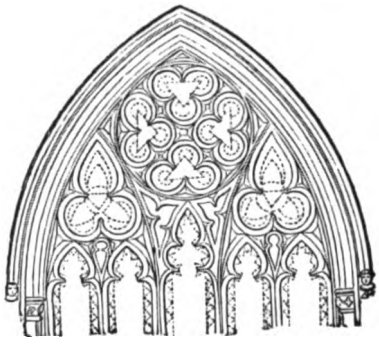


Fig. 386. Window and Section. Exeter Cathedral.

Pier.

that the vault appears to hang suspended. An endless profusion of tracery completely covers the surfaces between the ribs of the vaulting, and the richest development of fan-shaped roofing comes more and more into favor. This style attains to its most brilliant manifestation in the Chapel of King's College, Cambridge; and its most extravagant or decadent form in the Lady Chapel added to the choir of Westminster Abbey between 1502 and 1520 and known as Henry the VII.'s Chapel. This fan vaulting then marks a complete abandonment of the ribbed vault and a return to a solid single shell of cut stone, on the face of which ribs are worked for purely ornamental purpose. Here every available space on walls and vaultings is overspread with an exhaustless profusion of splendid detail, so that the grave dignity of the architecture is almost lost sight of in a fascinating play of fairy-like fancy (Fig. 388). This later style is not less charmingly displayed in the wooden roofs, which were built with much deliberate care, to combine a fanciful and varied kind of design with great solidity. These, owing to the national predilection for building in wood, had in many instances, even in the preceding century, been employed instead of stone vaultings; and were still more frequently used in this later time, splendid examples being found in the chapter houses and castle halls, and in the colleges

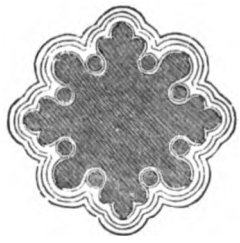


Fig. 387. Pier from York Cathedral.

Cathedral Church of the Holy Trinity at Gloucester (Gloucestershire), England. The view, taken from the southeast, shows the choir, with a long and elaborate Lady Chapel (fifteenth century) built out eastward from it. There is seen also the unique feature of a great east window which is not entirely in one plane, for the buttresses divide it and the two side pieces are in walls which slope a little away from the central portion.

GLOUCESTER CATHEDRAL

connected with the universities. Even in the principal portions of the churches—the nave, the choir, and the transepts—such wooden roofing is frequently used instead of vaulting, as in S. Alban's Abbey, now the Cathedral of S. Albans; and in the churches at Lavenham or Laneham and Long Melford, both in Suffolk; and many other structures. The wooden roof is elegantly, even splendidly, developed in all its divisions; and not unfrequently the forms of tracery borrowed from stone architecture play a conspicuous part in its ornamentation. Of this sort of work the most important example is the octagon at the crossing of Ely Cathedral, in which the most elaborate Gothic vaulting is imitated in oak. In this connection we may note as specially gorgeous the chapter house of

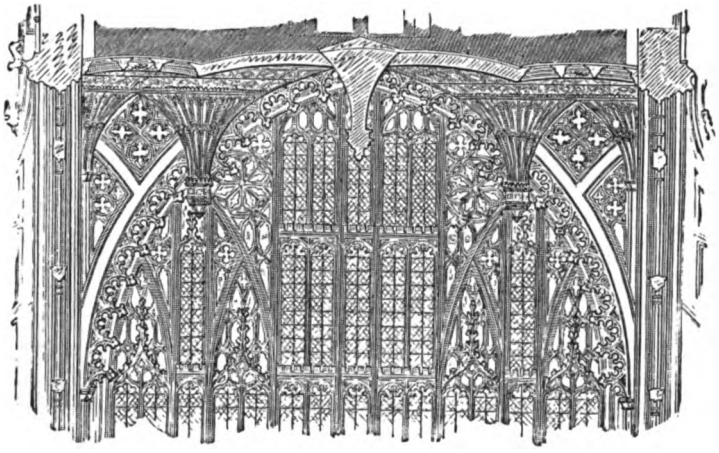


Fig. 388. From the Chapel of Henry VII. (Westminster Abbey.)

Exeter Cathedral, the great hall of Eltham Castle, and many other works. But the chief of all the wooden roofs of England is that of Westminster Hall, in London, of a date hardly later than 1325.

Chief among the Gothic edifices of Scandinavia* is the grand Cathedral at Drontheim, in Norway, belonging mainly to the thirteenth century. In the development of its ground plan and the treatment of details, the influence of the English early Gothic is unmistakable; but the decorative effect has been enriched by sundry specifically eastern elements, and reaches the utmost splendor. The design of an octagonal domed structure with a choir surrounded by an aisle is especially noble, and makes a charming perspective (Fig. 389). Among brick buildings constructed on the French ground

* Important work by A. V. Minutoli, "Der Dom zu Drontheim"; Berlin, 1853. Consult also the works cited in the chapter on the Romanesque style.

plan, with a more richly designed choir, may be mentioned the Cathedral of Upsala in Sweden, north of Stockholm; begun, it is said, in 1287, by a French architect, Étienne de Bonneuil.

Fig. 389. Cathedral of Drontheim.

A foreign architect, Gierlach of Cologne, is likewise mentioned in connection with the newer portions of the stately Cathedral at Linköping, southwest of Stockholm, the earlier parts of which are described above. The choir, with its aisle running round three

Cathedral Church of St. Peter at York (Yorkshire), England; the church commonly called York Minster, because originally a conventual church. The view from the southwest shows the square-topped tower at the crossing of the transept and nave and the rather over-elaborate west front. The exterior as we see it is in the main of the close of the fourteenth century.

YORK MINSTER

sides, as well as the two towers, bear the stamp of the later German Gothic. Among the churches of Wisby, in the island of Gothland, S. Katharine's is remarkable as an aisled church, built after German models. In the whole Scandinavian North, indeed, after the fourteenth century, German influence seems to have attained an ascendancy over English, especially in the case of Danish structures, and buildings in the modern Swedish Province of Schönen, subject to Denmark. The brick churches of Lübeck and the seaport towns of Mecklenburg evidently served as models—sometimes in the form of the hall church, sometimes in the type of the loftier middle aisle. S. Peter's Church at Malmoe, in the extreme south of Sweden, is a particularly pleasing edifice, having a total length of 235 feet, with a lofty nave,* with a pentagonal choir termination encircled by a low aisle with five polygonal bays—a modified form borrowed from North Germany (Fig. 390). The model in this instance was evidently the Church of Dobberan, from which was also taken the design of the transepts with their double naves. The Church of the Virgin at Helsingborg, not far north of Malmoe, has the choir aisle without the chapels, and its plan is further simplified by the omission of the transept. The main nave has no windows of its own, although it overtops the side naves by twenty-two feet: hence the effect is like that of a hall church, as in the Cathedral at Königsberg. Finally, the Cathedral at Aarhuus, on the mainland of Denmark, presents the perfect hall type (Fig. 391), recalling the North German style in its rectangular choir. Thus it may be seen

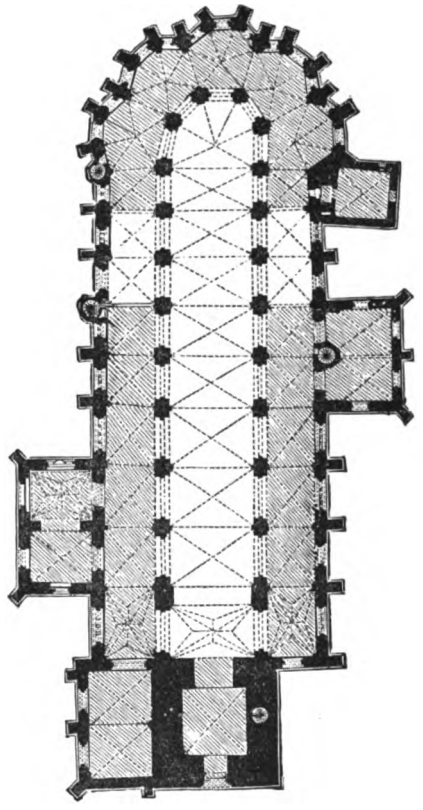


Fig. 390. St. Peter's Church at Malmoe.

* The higher parts are left white in the given plan.

that Scandinavia was even less successful during the Gothic epoch than in an earlier period in casting aside foreign influences, and arriving at an independent artistic development of her own.

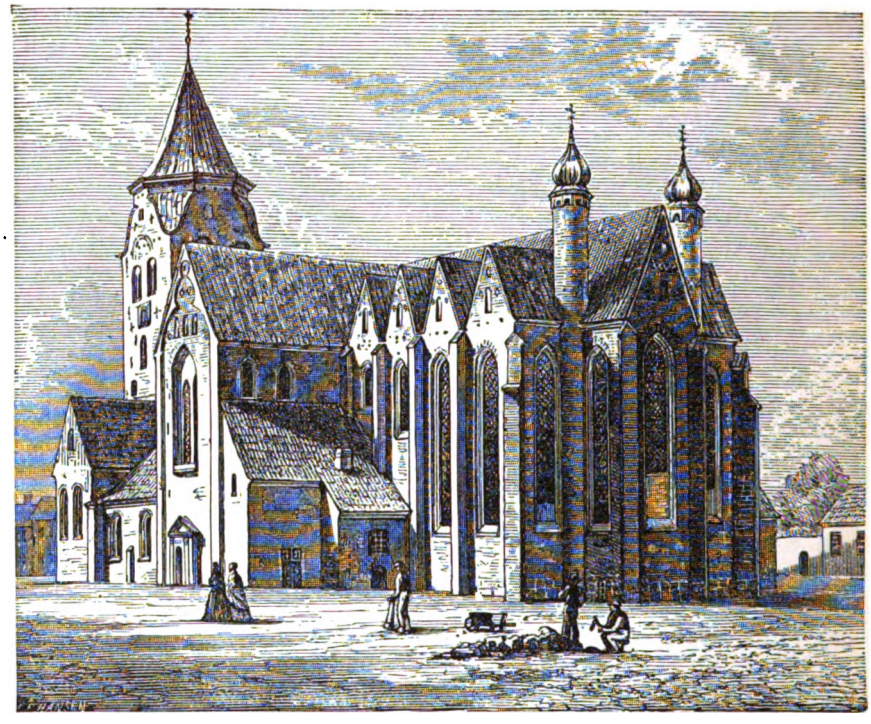


Fig. 391. Cathedral at Aarhuus.

ITALY.*

Gothic architecture in Italy attained quite as independent a development as in England, being modified after a not less original fashion, in harmony with the national ideas and necessities. The overpowering influence of antique tradition upon the genius of the people placed them in quite an exceptional position in regard to the Gothic. During the Romanesque period the greater part of the country remained faithful to the simple, wood-roofed basilican plan; or followed a system of vaulting for small spans and spaces of plain quadrilateral form, all very slight and unconstructional. How was it possible, then, that a style so utterly foreign as the Northern Gothic

* "Denkmäler der Kunst," plates 57, 58. Consult also the works referred to in the chapter on the Romanesque style.

Cathedral Church of St. Cuthbert at Durham, in the north of England. The river in the foreground is the Wear, and the cathedral crowns the woody hill so that it is thought the most beautifully located church in England. The towers are of the thirteenth century, but large parts of the building are of Romanesque (twelfth century) architecture. The noticeable difference between the placing of these English cathedrals, outside of the city and often among trees, while the great French cathedrals are packed in among the houses of the towns, has had little effect upon their architectural disposition.

DURHAM CATHEDRAL AND THE RIVER WEAR
FROM A PHOTOGRAPH

should succeed in breaking the chains of a tradition so exceptionally rigid? But, for all this, the universal tendency of the time was so strong, even here, that as early as 1220-1240 several churches had been built with pointed arches, and even with ribbed vaulting in some form, though only in rare instances was the Northern ground plan adhered to. What was chiefly adopted from the Gothic was, in the first place, the pointed arch, which, however, chanced to be especially employed with a view to satisfying by its assistance the predilection for vast, broad spaces. The vaulting of the main nave was raised by only a small space above that of the aisles, having small, usually circular, windows in the clear story; so that the principal means of lighting was through the lofty windows of the side aisles, and more especially the windows of the West ends. Moreover the inner surfaces were as flat and as free from architectural subdivision as those of a sixth century basilica. All this was widely removed from the tapering, upward-soaring tendency of the Northern Gothic, and from the effort of that style to break up all broad, calm surfaces, resolving them into a number of slender parts, supporting or buttressing one another. The taste for extensive mosaics or frescos had formerly been so strong and exclusive, that it did not seem possible to do away with the blank, open spaces necessary for these; and hence only small, narrow windows were introduced—which, indeed, were all-sufficient for purposes of illumination under that brilliant Southern sky. In this way grand breadths of space were secured, with a free and broad span, often marvelously harmonious and impressive in their effect.

The exterior as well as the interior rejected the rich, complicated composition of the Northern Gothic. Since the central nave only slightly overtopped the aisles, and since, furthermore, the genial climate and the custom of the country were favorable to low pitched wooden roofs, the buttress system was limited in its application, while flying buttresses are for the most part abolished, and even the buttresses exhibit more the character of Romanesque pilaster strips. Thus the calm effect of broad surfaces, in connection with the massive prominence of the principal parts, continues to be analogous to the antique and Romanesque usages, while a glowing decoration constantly carries out the spirit of the earlier time. As a rule, the traditions of the Romanesque remain in force throughout, not only as regards the plan of the whole structure—as shown in the favorite dome over the square, and the façade treated as an independent decorated screen—but likewise in the details of the ornamentation, where we see the pointed arch and other Gothic peculiarities—such as crockets, finials, etc.—introduced in a hetero-

geneous mixture with the round arch and other Romanesque elements. Thus the Gothic in Italy does not aim at or attain to a sustained organic development, but only to a modification of the earlier manner on the side of decoration. However, these buildings possess, by virtue of the spacious beauty of their interiors, the comprehensive

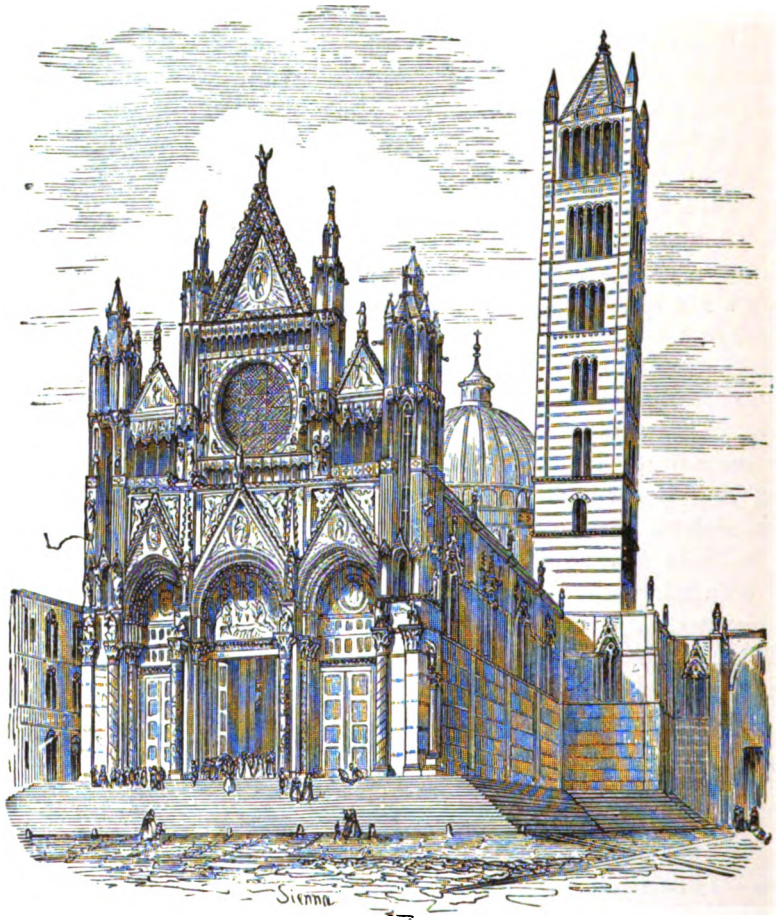


Fig. 392. View of the Cathedral of Siena.

effect of their outward aspect, and the noble splendor of the picturesque adornment of the whole—a quite independent artistic importance.

The Gothic was introduced into Italy, in the first place, by Cistercian monks from Burgundy. But as the Burgundian school was not, at the beginning of the thirteenth century, perfect mistress of the

Cathedral Church at Florence. The tower on the left is the famous Campanile of Giotto, and behind it is a part of the Baptistery; while beyond a little of the cupola of San Lorenzo shows. The entire flank of the church and the remarkable group of apses around the great octagon are all sheathed with marble. The great cupola is of later date than the rest of the church and is of the early years of the Renaissance.

FLORENCE

CATHEDRAL OF SANTA MARIA DEL FIORE

Gothic style as developed in the royal domain of France, the earlier conventual churches in Italy are still transitional in character. The Church of Fossanova near Rome, and that of San Galgano in Tuscany, not far from Siena, are of this character. Their date is known to be of 1200-1218; and the Church of S. Martino, near Viterbo, in the Province of Rome (Lazio), was begun about the same time. S. Francesco at Bologna was built between 1236 and 1240, and is less Northern in character; the ribs of the vault descending no farther than the capitals of the heavy pillars, which are only a little way below the springing line of the arches. S. Francesco at Assisi, in Umbria, is of the years before 1236, and must have been nearly completed at that time. Now, none of these buildings are completely Gothic in the way that contemporary buildings in the neighborhood of Paris are Gothic. They begin the long succession in Italy of churches which, though built with pointed arches and with some use of ribbed vaulting in its true sense, are yet Southern in spirit. They have low-pitched roofs, large, flat wall-surfaces within and without, and small windows; and the flying buttress is almost wholly unknown. Nothing is known of the designers of these buildings; and it can only be inferred that they originated in those Northern buildings which are most like them. Such are the Abbey Church of Pontigny near Auxerre, that of Vézelay, that of Montréal, and that of Pont-sur-Yonne, all these churches being contained in a small region of Northern Burgundy which did not become an integral part of France until 1477.

The Church of S. Francesco at Assisi exemplifies in itself the Italian way of treating the Gothic style. This church has its broad wall-spaces covered with elaborate figure-paintings, and the ribs of the vaulting, which are large and extremely simple in section, are richly painted with varied patterns, these patterns being matched and even surpassed in variety and beauty of design by the broad, flat borders which surround and set off the pictures of religious incident. A very grand effect is attained in the spacious plan of the Cathedral at Florence, begun in 1294 by Maestro Arnolfo di Cambio (called, erroneously, Arnolfo di Lapo). In this case, too, the love of broad spaces is apparent, and is sustained with great boldness, especially in the square divisions of the vaulting of the middle nave, about sixty feet wide. But this tendency is here carried to extremes, and the unfavorable effect is increased by the particularly meager means of lighting. The colossal octagonal domical building, with the three transepts studded with chapels, was completed only at a later epoch. A superb marble façade was begun as an addition to the building in 1357, but never finished, and, later, torn down. This last was

wrongly attributed to Giotto, who died in 1336. However, this great master really directed the noble marble casing of the two portals situated on the north and south sides, next the façade, besides having erected the bell-tower (Campanile), which soars aloft close to the façade—a rare artistic harmony of noble construction and rich marble decoration. After the master's death, his pupil Taddeo

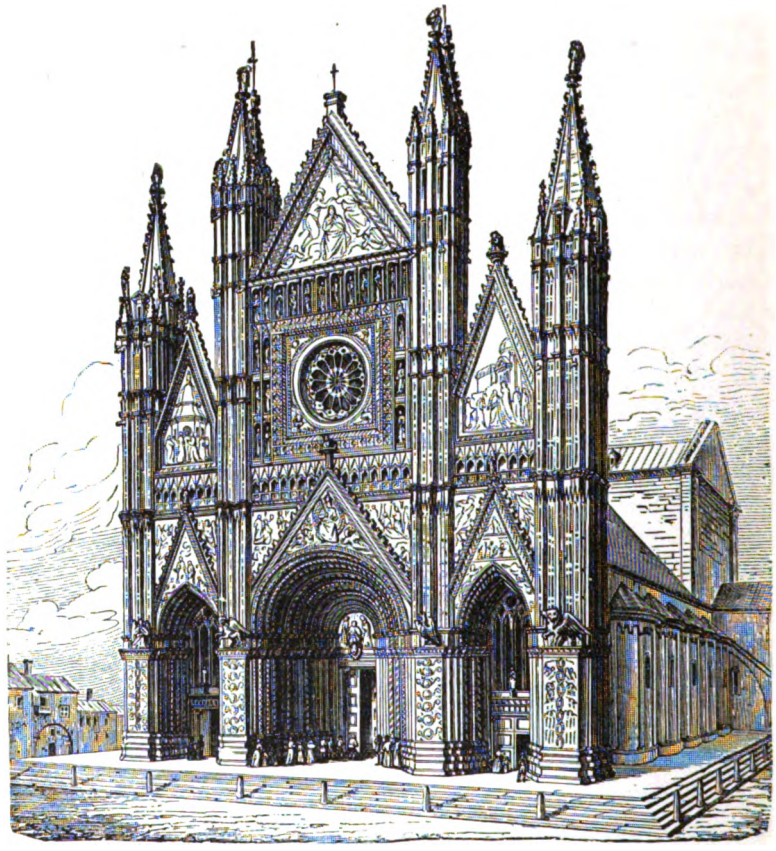


Fig. 393. Cathedral at Orvieto.

Gaddi carried on the building of the Campanile according to Giotto's plans. A modern west front designed to correspond with the ancient flanks of the church was built between 1880 and 1885.

The Cathedral of Siena, built in the thirteenth century, carries out the same idea of the union of the domical building with the parallelogram; without, however, succeeding in bringing the hexagonal dome into clear relations with the three aisles. The spacious effect of the interior presents an animated and charming perspective, though

Cathedral Church of Milan in Lombardy. This, which is the largest of all Gothic buildings, is altogether exceptional in the method of its design and can not be accepted as representative of Gothic art in its purity. It is built entirely of white marble, which makes it unique among such buildings, and the larger pinnacles are capped with statues—wasted entirely because they are at an immense height above the square and because the brightness of the sky destroys their delicacy of outline. The central tower, lowered in the picture by the perspective, is yet very high, rising 360 feet above the pavement. The great doorways and windows of the front are of the florid style of the later Renaissance.

MILAN

THE CATHEDRAL

the tranquillizing effect is lessened by the use of alternate bands of black and white marble. This interior is, however, only the transept of the proposed vast structure which the Siennese undertook. The exterior (Fig. 392) is made especially remarkable by the façade, fronting southwest, and built before 1280, with its richly colored decoration, which was added in the nineteenth century. But the façade design, considered apart from the body of the church, first rises to its highest perfection in the Cathedral of Orvieto (Fig. 393), begun in 1290, and attributed to Master Lorenzo Maitani of Siena, being no less conspicuous for the prodigal magnificence of its marble sculpture and its great mosaic pictures, than for its clear, harmonious composition. The interior, on the other hand, shows a retrogression toward the timber-roofed basilica.

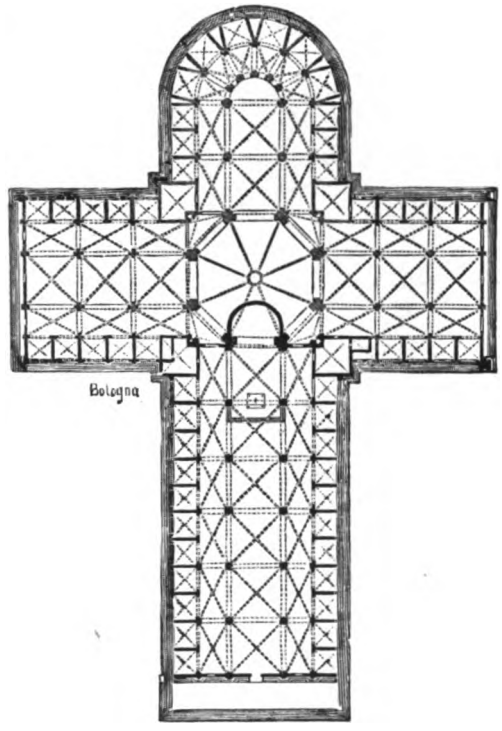


Fig. 394. Ground-Plan of San Petronio at Bologna.

The Cathedral of Milan, recommenced toward the close of the fourteenth century on a new plan, has nothing in its design to recommend it. It is of very great size, 486 feet long—covering more ground than any other building of Gothic type—and having a central spire which rises to the height of 365 feet; moreover, it is built entirely of white marble, extremely elaborate in design and decorated with sculpture, which includes a great number of free statues; but it is feeble in composition, and inartistic. The five-aisled nave, the three-aisled transept, the uncommonly close position of the piers, the presence of a choir aisle, are unmistakable illustrations of a Northern, probably German, tendency; though in the heights, Italian taste carries the day, resulting in a threefold gradation from the central nave to the outer side aisle.

Great as is the effectiveness of the interior, and magical as is the brilliancy of the marble splendor of the exterior, architectural claims of a higher order are nevertheless, on the whole, unsatisfied. It is after quite another fashion that a second colossal structure of this late era—the Church of San Petronio at Bologna, begun, according to the plan of Antonio Vincenzi, in 1390—seeks to adapt Gothic forms to Italian needs. In the system of the main building (Fig. 394), a tendency to return to the principle followed in the Cathedral of Florence is quite unmistakable; but through the addition of two

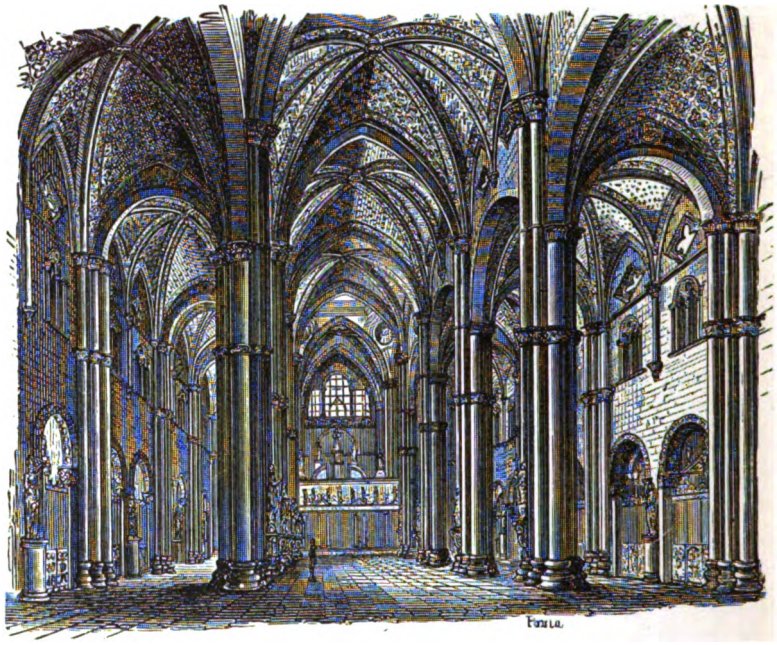


Fig. 395. Church of La Certosa at Pavia.

chapel aisles the structure acquires a richness of perspective which makes one doubly regret the only partial completion of the colossal plan. A transept, divided like the main building into five aisles, was to have been added, as well as a great central, octagonal dome; while the choir was to have been carried out in harmony with the main building, and finished with a surrounding aisle and circle of chapels. The total length would have reached 640 feet, the dome equaling that of the Florentine Cathedral in size. As it is, the parallelogram ends rather barely in a semicircular or apse-like niche. Finally, the Church of La Certosa, near Pavia, begun in 1396 (Fig. 395) may be reckoned among the noblest of those structures in which the

The Palazzo Vecchio (Old Palace) at Florence in Tuscany. It is the old Town House or Municipal Palace of the community, and took its present shape in the thirteenth century. The tower, which is built out upon the overhanging story which rests upon the great corbels, itself carries a corbeled coronal, which in turn supports the strange belfry. On the right is seen a part of the Palazzo degli Uffizi (offices), over which is the great Museum of Fine Art. The square tower on the hill at the left is that of San Miniato.

PALAZZO VECCHIO, ITALY.

Italian love for spacious effect finds, in the Gothic system, a perfectly unfettered and beautiful expression. The Cathedral at Como is of kindred design, and of an equally high order of spacious beauty. Its nave was begun in 1396; and about 1513 choir and transepts were added in the stately style of the early Renaissance.

Among Italian civil and secular buildings there are a great number of considerable works. The palaces of Florence, the most notable of which are the Palazzo Vecchio and the Bargello, bear the impress of bold, defiant strength, with something of the gravity and gloom of a fortress. In the Loggia de' Lanzi, on the other hand (built after 1376), Florentine secular architecture attains a rare distinction and light beauty of proportion, in which, however, the round arch is again employed. The palace architecture of Siena, making a considerable use of brick, has a thoroughly consistent, noble organization, as in the vast Palazzo Publico and a number of fine private residences, prominent among them the Palazzo Buonsignori (Fig. 396). Among the open arcades erected in the various towns, the Loggia de' Mercanti (Exchange) at Bologna exhibits the elegant style of the fourteenth century carried out in rich brick architecture. Light and graceful are the Gothic palazzi of Venice; their façades almost invariably enriched by exquisite loggie, thereby showing their special adaptation to life on the canals, as well as supplementing the limited courtyard space. The brilliant Cà d'Oro is a daintily elegant building (Fig. 397); and no less bright and graceful are the Palazzi Foscari, Pisani, and others. This style reached an expression of magnificent grandeur in the Doge's Palace, of which the present exterior was commenced about the middle of the fourteenth century, its upper and lower colonnades being the most

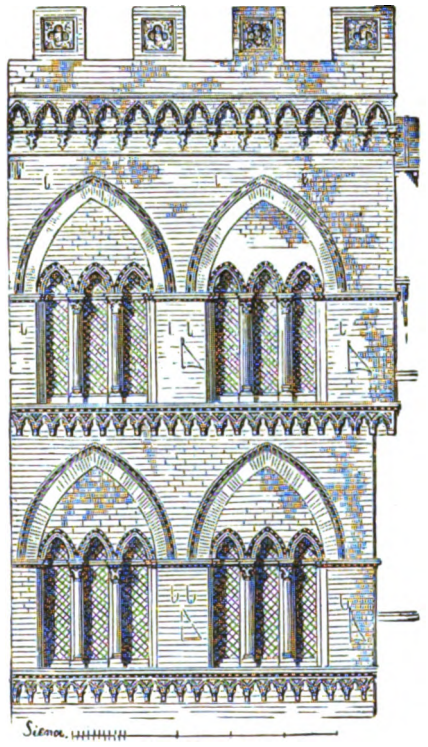


Fig. 396. The Palazzo Buonsignori at Siena.

magnificent of their kind in the world. And, finally, the Castello at Ferrara, with its frowning brick walls, and its towers with their defiant battlements, should be mentioned as an example of the fortress-like dwellings of Italian princes.

It has been noted how little the Italians cared for the essential charm of Gothic architecture, its highly organized building. They clung to old habits of simple walls carrying low-pitched roofs; and avoided the flying buttress, and, within the great height of the nave above the aisles, with all that that difference in height brought with

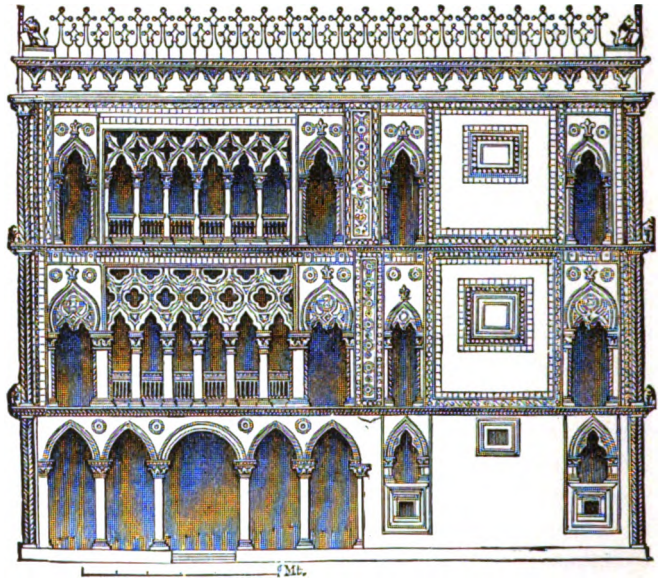


Fig. 397. Cà d'Oro, Venice.

it in the north: triforium, high clear story, carefully marked and decorated vaulting shafts. In a similar clinging to ancient Southern habits and tastes they used sculpture largely as the Romans of the great Empire had used it, more modified by the architectural requirements than among the Greeks, but much less so than among the Northern Gothic builders. In like manner, too, they used what was almost unknown in the north at this time—inlay, incrustation, and mosaic. The Cosmati, who have given their name to the richest form of this work, first appear in the twelfth century, but their chief works are of 1224-1231 (S. Magnus at Agnani), of 1296 (S. Maria in Cosmedin, Rome), and, later, in several of the greater Roman churches. The twisted columns of the cloister at S. John Laterano is

a famous instance of their exquisite inlay of triangles and squares in color and gold, the glass mosaic being incrusted in the marble.

As early as the beginning of the fifteenth century, the Gothic was displaced in Italy by the revival of the Antique (the Renaissance), and was able to maintain itself only in isolated instances and in a few places; its character even then being essentially modified by the introduction of elements tending toward the spirit of antique models.

SPAIN.

The Gothic was first introduced into Spain from the neighboring realm of France. We frequently notice in the earliest Gothic buildings not only traits that recall the rich Romanesque style of the country, but likewise an occasional adoption of some of the lavish decorations peculiar to Moorish architecture. A particularly brilliant style seems to have been thus developed. Although we have no sufficient data as to the progress of this development, owing to a lack of complete research in that direction, the Spanish Gothic in its perfected form nevertheless exhibits a suggestive individuality. The consistent constructive system and the varied ground plan are here grasped with spirit and understanding; while in the proportionment of height, a method of gradation is adopted which corresponds to the Italian Gothic. There is, however, a predilection for the construction of the façade after the Northern fashion, not even lacking the open-work spires. But at the same time there is an equal fancy for retaining the tower over the transept square, which tower often takes, as in the Romanesque style of Spain, the low and ample form of a lantern; while the ornamentation brings the rich Gothic world of form into combination with the luxuriant decorative magnificence of Moorish works. From this combination structures result which may be reckoned among the chief monuments of the whole mediæval period for grandeur of plan and splendor of erection.

The Gothic style seems to have been domesticated in Spain with the rebuilding of the Cathedral of Lerida, the building of that large part of Burgos which belongs to the thirteenth century, and the noble west front of Leon in 1221. Burgos Cathedral is a vast building with polygonal choir, including an encircling aisle and chapels, suggesting the French model as plainly in its ground plan as it shows in its details an interweaving of Moorish reminiscences. The façade, however, with its open work spires (Fig. 398), is, traditionally, a production of the German master. Still more grandly planned and boldly executed is the Cathedral of Toledo (1227), at-

tributed to a Spanish architect called Pedro Perez (or Petrus Petri), and intended to outrival even that of Burgos. The proportions are still more considerable; and the whole structure is designed with five aisles and with a polygonal choir, around which the side aisles are carried as deambulatories, with little chapels; an arrangement which likewise finds its prototype in a French work, the

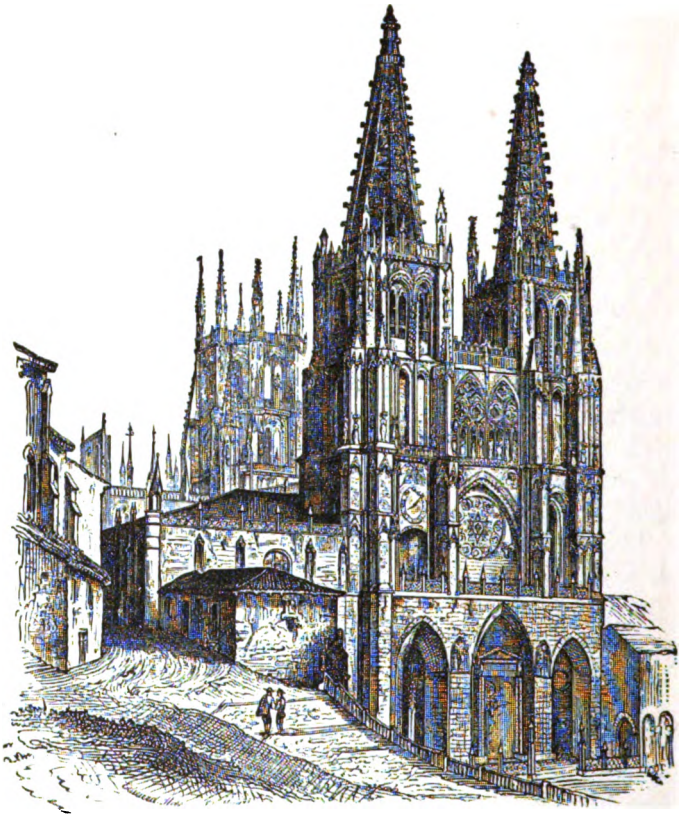


Fig. 398. The Cathedral at Burgos.

Cathedral of Bourges. The central nave rises to a great height, while the aisles, as in the case of many Italian buildings, are graduated in their height; so that the inner portion considerably overtops the outer. French influences may be still more unmistakably traced in the noble Cathedral of Leon, the plan of which bears most resemblance to that of the Cathedral of Reims. Begun in the middle of the thirteenth century, this superb specimen of architecture is remarkable for the nobleness of its forms and the tapering boldness of its proportions, as well as for the magnificence of its broad and lofty windows.

In Spanish monuments of later date, foreign influences are modified in favor of a type more in harmony with national customs and a Southern climate. The height becomes less marked; but a rich lantern is generally placed above the square, which the Romanesque epoch had already made familiar. The windows grow smaller, the wall-surfaces greater, and the breadth of the main building, as in Italy, is often very considerable; so that frequently an effect similar to that produced by Italian buildings is suggested. The Cathedral of Valencia is noted for a beautiful domed tower; this church was begun in 1262, but is in greater part a production of the fourteenth century. The Cathedral of Barcelona ranks among the most important of the buildings executed in the true national spirit; an imposing edifice with rich choir aisle and chapels, a central nave forty-two feet wide, with aisles flanked by a series of chapels placed at regular intervals. The motive which pervades such designs, which are special favorites in Catalonia, recalls Italian architecture in such buildings as San Petronio at Bologna and La Certosa at Pavia. Great quadratic vaultings, with yet greater boldness of span, are exhibited in the same region by Santa Maria del Mar. The Cathedral of Gerona has a choir with three aisles and circle of chapels, and to these has been added a single-aisled main building seventy-three feet wide, flanked by a series of chapels (Fig. 399) placed at regular intervals. This is much the widest Gothic vault in existence or on record; the next in order being that of Toulouse in Southern France.

Two peculiarities of the greater Spanish churches remain to be noted; the outer roof and the divided service choirs. It was always rather common to cover the roofs with slabs or large tiles of stone, laid at a very low pitch; and these nearly flat roofs alternate with steep tiled roofs of the ordinary sort, even in the same building. The inclosed space for the clergy and choristers, called *coro* in Spanish, is often made very large, and carried far down into the nave; then to allow a passage across the church, it is divided into "Coro" proper and "Trascoro."

The later architectural attempts reject, for the most part, the more splendid French choir design, and favor a simpler arrangement of the ground plan in all respects. Among such edifices, the Cathedral of Seville, begun in 1403, is one of the most imposing. Its five aisles are of different heights, graduated according to the precedent set by the Toledo Cathdral. The transept square is carried into a dome.

In Portugal the only Gothic buildings that have attracted the attention of students are of late epoch. In these buildings a style is seen to have begun to form itself—a style worthy to be compared with the late Gothic of England or of Germany. It is

noted above how commonly the different nations of Europe show more originality in their fifteenth-century Gothic, and that of the succeeding styles, than in the purer thirteenth century work which

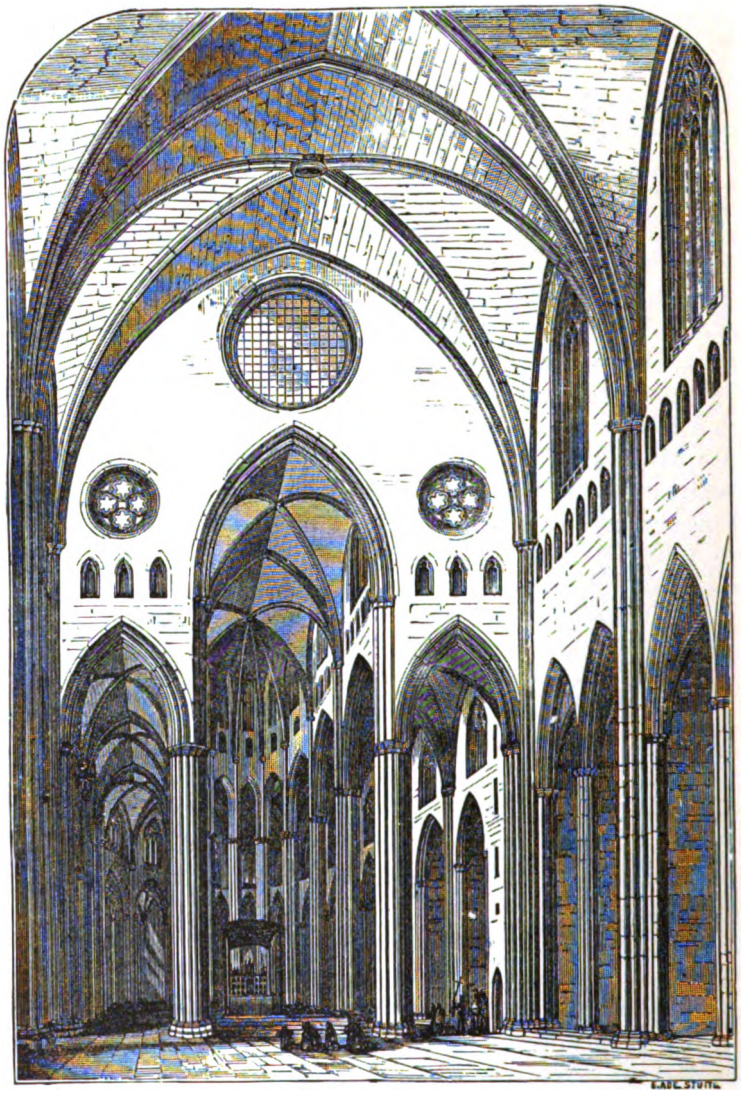


Fig. 399. Cathedral of Gerona.

was inevitably taken almost unaltered from France. Thus, the late English Perpendicular passing into Tudor architecture, the florid Spanish work of the same epoch, the town halls of Belgium, are all

Cathedral Church of Seville in Spain, with the remarkable tower known as the Giralda, the Moorish name which clings to it. It is of Moorish construction, too, as far as the belfry chamber, the crown being of Spanish neo-classic style. The walls of this tower are adorned by a curious pattern of brickwork in relief, the sharp edges of the pattern throwing strong shadows.

SEVILLE
THE GIRALDA TOWER AND THE COURT OF ORANGES

independent styles. But it is also clear that no one people acting in this way largely by itself was able to build up a style so important and of such permanent influence as to carry it over the hostile influence of its neighbors. Even the magnificent French Gothic, the Flamboyant style of the fifteenth century, but slightly influences the work of the people on the Rhine or in the Spanish Netherlands immediately to the north of the French kingdom. So small and so poor a country as Portugal could not fail to share in this experience, and accordingly the style called Manuelino, from the king Don Manuel who was reigning in 1500, and the somewhat more entirely mediæval style contemporaneous with it, are limited for important monuments each to a single group of buildings at Belem and at Batalha.

There is, indeed, a large church at Alcovaça and the Cathedral of Lisbon, each of which has a perfect Gothic plan and the remains of thirteenth century buildings. The same purity of plan occurs in the Conventual Church at Batalha, where indeed the chevet with its ring of flying buttresses is perfectly carried out. These buildings are full of suggestion, and contain much that is novel, with but little evidence of pure Spanish influence; but they are not of importance in the general history of fine art.

3. Gothic Sculpture and Painting.

A.—ITS SUBJECTS AND MANNER.

While architecture gradually passes from Romanesque to Gothic, a similar process takes place in the plastic and graphic arts. The change is, however, far less plainly marked in sculpture and in painting; and this because the basis of architecture was changed by the adoption of a new way of building, while the foundation of representative art remained still, as before, the study of visible nature. The circumstances, the task, and the theme of these arts remained materially the same as in the preceding epoch; but a new spirit is behind them. The circle of representation is enlarged and enriched; and, most of all, the art of such representation becomes an earnest and loving study of nature rather than a patient following of tradition. We have, indeed, conspicuous examples in Germany and Italy, reaching into the thirteenth century, of a movement extending throughout the whole range of the plastic arts, the productions of which still held fast to the Romanesque style and to antique tradition. Nevertheless, this antique sentiment, however noble and elevated, by no means filled the measure of the requirements of the quickened national spirit. As

the case of architecture has already shown us, an energetic struggle between two equally powerful forces resulted in the transformation of the ancient forms, and produced, toward the middle of the thirteenth century, a new style, which differed radically from the Romanesque in every respect. This style had barely reached its full development before it spread over the entire Christian world of the West, and was adopted with a unanimity which bore witness to the fact how completely it was accepted as the exponent of that age. Late in the fourteenth century, and during part of the fifteenth, the new method was held to; although, perhaps on that very account, it asssumed a somewhat conventional character, and often became corrupted by an external mannerism.

This new style did not arise because there was anything especially new to express, but because the old thought was conceived with fresh fervor, because it was enlivened by a constant reference to natural form in its working out, and because it sought in this way a more adequate expression. The soul of the individual, stirred to its depths, yearned to put into visible shape its own personal interpretation of the sacred doctrines of the redemption. The sculpture and painting of that day were intended to embody, and do embody, a glowing enthusiasm, a longing intensity, and a noble self-surrender; but the method of expression was in a realism so sincere and complete that even in our modern day of much greater knowledge, we are amazed and put to shame by the thoroughness of naturalistic treatment of the thirteenth century sculpture. These figures lose the stately dignity and elevated expression of repose which characterize the antique works of art. They are slender and slim and willowy, and generally represented with a dreamy poise of the head, adorned with curling locks. The inclination of their bodies is at an angle, which throws the center of gravity to one side, while the other is far drawn in, swaying the body out and in, as though they followed every impulse of the emotions. The impulses of their souls find expression in a look of radiant purity which, almost without exception, gives a winning brightness to the face.

This predominant expression is intensified by the predilection for representing youthful form. There can hardly be conceived a sharper contrast than between this tender, blooming youth and the hoary, aged figures of Byzantine art. To be sure, the new style loses in bold, robust manliness, since even representations of men are clothed with a feminine grace; so that one may find in them a reflection of the culminating period of chivalry, of Mariolatry, and of the worship of women. The drapery falls in soft, undulating folds about the slender, graceful limbs, down to the feet. The principal features of

the antique costumes have been retained, in point of fact; but they have been so far modified in accordance with the practical aspect of the age that they appear to be entirely novel. The actual garb of the age had preceded the work of the artist; and as his eye was by this time trained to receive impressions of the outward world with greater definiteness, differences in costume were also indicated in his creations. Indeed, even so seemingly insignificant a circumstance as that of the use of soft woolen fabrics, instead of the linen ones previously preferred, had its influence in the transition from the stiff, lifeless parallelism of the linen folds to the soft and innumerable plaits of woolen material.

But great as was the internal difference of sentiment between the figures of this and the preceding age, a still sharper division existed as regarded their relation to the architectural whole. Although the figures were animated by a new sentiment, and individual aspiration endeavored to find expression in them, still no single figure possesses any special personal meaning. It still appears with a background of architecture, or in an architectural framework. Hence these figures, in spite of whatever individual expression they may have had, were subordinated to the sway of that great universal thought which they helped to illustrate; and only through their relation to that thought are they made distinctly and clearly intelligible to the race.

In one respect, Architecture had a direct effect upon the productions of the plastic arts, when, in her rich plastic decoration, she opened a wider field to sculpture. At the same time, the complete breaking-up of the surfaces of the walls into windows almost entirely put a stop to wall-painting, and in its stead opened the field to glass-painting—a style of art which, owing to its unusual technical limitations, could never advance beyond a certain point. Only Italian art continued to preserve the wall surface, and thus at this very time laid the foundations for its subsequent great achievements in painting.

With the fourteenth century the severity of taste and the logical exactness of work diminish; but this tendency is seen far more in architecture than in sculpture or in painting. In architecture the rigor of the law early relaxed; but, in the plastic and the graphic arts, the movement so firmly fixed in the universal mind, and so ingrained in the very being of humanity, continued until some time later. As late as the fifteenth century, representative art not only maintained considerable purity, but also, to a certain extent, gained in depth and sentiment. Then, however, a new force—that of the new knowledge gained largely from the study of antiquity—appeared in the world, bringing about a complete transformation of artistic con-

ceptions, and introducing a new style into the plastic arts, which swept on with a powerful impulse, away from mediæval forms, and toward a new epoch.

B.—HISTORICAL DEVELOPMENT IN THE NORTH.

In sculpture, now most intimately associated with architecture, France takes the lead. New cathedrals required sculptured decorations, as no earlier epoch had known to the same extent. The great portals with their expanding shape, giving sloping side walls and arches; the tympanum; and, later, the horizontal galleries so dear to the French Gothic style, which complete the principal division of the façade, were profusely adorned with sculptured figures. These, in the lowest rank, where they are backed by the walls of the porch, are often larger than life, while those of the curved intrados above are

Fig. 400. Southern Side Portal of the Cathedral of Paris.

naturally much smaller. When the enormous extent of these structures is considered; when it is reflected that there are generally three doors in the west front, to which are frequently added as many doors in the façades of the transepts; it is easily conceivable that a wider range is here accorded to plastic art than had been in any other epoch. Hence arose, along with the demand, power to create these profoundly symbolic representations which appeal to us like a "Divina Commedia" carved in stone. The tympanum, or flat surface beneath the arch and above the square head of the doorway, is charged with relief sculpture. The fall, the work of redemption, the resurrection, and, as a climax, the Judge of the world enthroned, dividing the good from the bad—such is the constantly recurring theme of these great cyclic works; about which, as a central idea, are grouped the saints of the particular locality, in appropriate arrangement, with their special legends. Thus the spirit of the people was raised from the holy legends with which it was most familiar to what was general, and embraced all mankind. Events were also portrayed, having a still closer relation to human life itself and to the circle of daily

activity, set in the frame of the changing hours and seasons; and these, too, were again brought into connection with the divine governance of the world.

We are first met by a series of works of this description, which, like the buildings of that period, mark the transition period between the Romanesque and the Gothic. The sculptures on the façade of the Cathedral of Paris are of remarkable design, although much injured and in part restored. The representation begins on the north door with the life of Mary; and even here the rigid traditional style is already developed into flowing life and noble grace, particularly in the sentiment and the form of the heads. The principal door, with its elaborate representation of the Day of Judgment, has suffered the most from injuries and restorations. The sculpture of the south door belongs, for the most part, apparently to an earlier period. On the other hand, the sculptures on the façades of the transepts, which date from the latter half of the thirteenth century, show a complete emancipation from the stiff, archaic types, and the noblest and most distinct perfection of style (Fig. 400). A central thought, resembling that on the façade of Notre Dame in Paris, is splendidly wrought out on the three doors in the façade of the Cathedral of Amiens. Here scenes from the life of Mary, and of a local saint likewise, furnish the themes for the representations on the side doors; while the principal door contains the impressive representation of the Last Judgment. The colossal figure of the Redeemer on the middle pillar of the door gives a vivid illustration of the noble style of the whole, especially of the beautiful treatment of drapery (Fig. 401). Beneath his feet there is a personification of Evil overcome by him, in the shapes of a lion and dragon. The sculptures which decorate the porches of the north and south transepts of the Cathedral of Chartres, are still more comprehensive. Almost two thousand figures, large and small, are grouped according to a fortunate architectural arrangement, and set forth the story of the redemption, as well as the entire circle of knowledge of the time, with lavish historical and symbolic illustrations. Here, too, the style is one of elevated solemnity, with suggestions of the stern earnestness of the earlier period. The majority of the magnificent sculptures on the portals of the chief façade of the Cathedral of Rheims exhibit, on the other hand, the plastic capability of the period developed to the loftiest freedom and grace. They repeat the same theme; and over the main entrance is a representation of the Last Judgment, the different parts of which show a marked versatility in artistic treatment. The Judge of the world, stern and awful in look, is throned in the tympanum; the figure of the Redeemer, on the

middle pillar, is, on the other hand, noble and mild in expression, and is one of the most perfect works of all mediæval art; the apostles on either side the entrance are figures full of strength and meaning; the sitting figures of the saints, finally, in the tympanum (Fig. 402), are executed with delicacy and grace; while the naked figures of the dead, in *naïve* and natural attitudes, are leaving their tombs at the resurrection.

Fig. 401. The Christ of the Cathedral of Amiens.

When we survey the almost incredible multitude in this world of figures, of which we have only mentioned the most conspicuous, and which were all executed in the course of the thirteenth century, we are amazed at the energy and creative power of this epoch, the youthful vigor of which is, perhaps, not more brilliantly preserved in anything than in the intimately associated creations of architecture and sculpture. The last half of the century, the reign of S. Louis, attained a climax which has been likened, not without justice, to the age of Pericles; in fact, the whole Middle Ages can offer nothing, in point of classical purity and elevation, to compare with the finest among these works. The artists of the sculptures at Rheims have attained a height of style which recalls the noblest works of antiquity, with the addition that an individuality of sentiment finds a deep yet gentle expression in them. There is an illustration of this gentleness carried to excess in the sculptures of the Sainte Chapelle in Paris, where the figures of the apostles almost verge upon sentimentality, in the peculiar bend of their attitudes, their constrained positions, and the expression of their heads; though this defect is kept within bounds by the free, fine grouping, and moreover by the dignified treatment of the draperies. After the thirteenth century had expressed itself in such glorious productions, sculpture, as well as architecture, greatly degenerated in France in the fourteenth century; and the more scattered works of this period already incline to a conventional style. But in Germany, about this period, artistic skill received a fresh

impetus, and produced works which, if not so magnificent, still possessed the charm of variety and pleasing grace. We may find many examples of plastic works even in the thirteenth century which take up with fresh spirit the new style just arisen in France. The new manner is easily recognizable (though in a Romanesque interpretation) even in compositions like those referred to above, in Wechselburg and Freiburg. Similar creations, but with a still more decided introduction of the new principle, are the statues on the south door of the east façade of the Cathedral of Bamberg, as well as in the interior of the church, on both sides of the east choir. This youthful, vigorous period, in its fresh feeling of the importance of the individual, ventures even upon equestrian statues, as is shown by the life-

Fig. 402. Figures in Relief from the Cathedral at Rheims.

like esquestrian statue of King Conrad III. in the Bamberg Cathedral, and the statue of the Emperor Otto the Great in the Square at Magdeburg. Also a series of sculptures in the Cathedral of Naumburg belong to the most conspicuous works of this category. On the other hand, in Germany only exceptionally, as in Minsters of Freiburg and Strasburg, do we find that profounder, more comprehensive decoration which belongs to the French cathedrals (Fig. 403).

In the fourteenth century, sculpture in Germany reached a high stage of varied beauty; and if it did not attain to magnificent grouped compositions—which were, indeed, precluded by the almost exclusively architectural ornamentation of the churches—there nevertheless exist in many isolated works, perhaps on that very account, a great depth of sentiment, and often a great finish of execution. The

statues of Christ, of his mother, and of the apostles, on the pillars in the choir of the Cathedral at Cologne, are of great value from this point of view, though they were completed after 1350. Although of great freedom and beauty, especially in the treatment of the drapery, they show that gentle inclination of the body and swaying attitude which become almost universal, even to mannerism, in the works of this period. They are, besides, of special interest through

Fig. 403. Statues from the Minster at Strasburg.

their excellent polychromatic coloring. The sculptures of the southern door of the façade and the reliefs of the high altar belong to a somewhat later period: they are exceptionally carved in white marble upon a dark marble background. Much else of interest is found in other Rhenish churches.

A peculiarly vigorous and influential activity appears to have arisen in Nuremberg. The rich sculptures on the magnificent façade of St.

Lorenz probably occupy a position just between the thirteenth and fourteenth centuries. The principal door has upon its middle pier a statue of the Madonna; on both sides, apostles and prophets; in the tympanum, scenes from the life and passion of Christ; and, finally, the representation of the Last Judgment, composed of numerous figures. The decoration of the "Beautiful Fountain" (1385-96) has

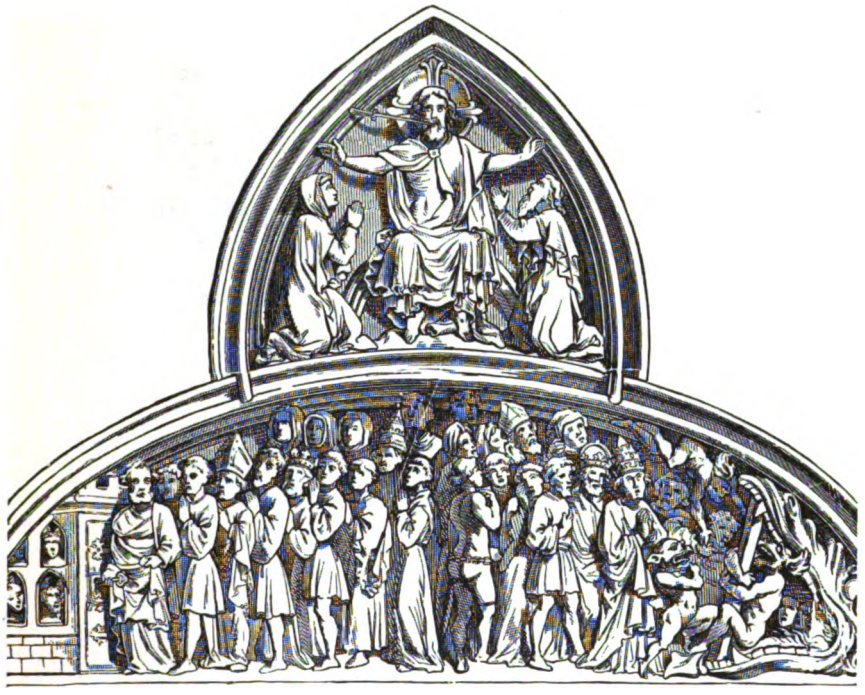


Fig. 404. The Last Judgment. From the Frauenkirche at Esslingen.

hitherto been erroneously ascribed to a so-called Master Sebald Schönhofer, probably an altogether mythical character: Its design and arrangement afforded a field for representation of the secular art of the period. There are sixteen full-length figures on the eight pillars, standing under handsome canopies: First the seven electors; then three Christian, three Jewish, and three Pagan heroes—Clovis, Charlemagne, and Godfrey of Bouillon; Joshua, Judas Maccabæus, and David; Hector, Alexander the Great, and Cæsar; higher up are Moses and the seven prophets; and besides these, all manner of heads of men and beasts, gargoyles, and so on. The sculptures in the vestibule and on the principal entrance of the Church of the Virgin, the central point of which is the history of Mary and her glorifi-

cation, are of a somewhat later date—perhaps about the beginning of the fifteenth century. The sculptures on the southern and northern doors (the latter known as the "Bride's Door") of the Church of S. Sebald are of a somewhat inferior style, and belong to the latter part of the fourteenth century.

Suabia appears to have been active in the production of sculpture in the first quarter of the fifteenth century. It found a rich opportunity in the decoration of the Frauenkirche at Esslingen, which displays a goodly number of sculptures on its buttresses and doors. There is a representation of the Last Judgment over the main entrance of the south side, which, in its vigorous freshness, is not without *naïve* touches, and which deserves mention also on account of its original architectural surroundings. The figures still have the stamp of ideal dignity, but with it an effort at energetic realism, which gives to the whole an original and vigorous character. This is aided by the more massive treatment of the bodies, which do not run into the extreme of thinness (Fig. 404). The plastic works with which the stately Church of the Cross at Gmünd was adorned about 1410 are very much richer, and also more important. The main entrance of the Church at Thann in Alsace possesses a magnificent sculptured decoration.

The numerous works of the school of sculpture of Tournay in Belgium take a very high place in the history of art, its activity having extended from the middle of the fourteenth century until far into the fifteenth. Its principal productions are sepulchral monuments, representations in relief, which, though proceeding from a basis of mediæval sentiment, exhibit a close study of nature in all the details of their work, and thus foreshadow the tendency which afterward appears so strikingly in the realism of Flanders. These monuments are, for the most part, in the possession of a private individual; others, again, are in the different churches of the city. To these should be added the productions of the architect Claux Sluter, whose name plainly indicates a German or Netherlandish origin, and who was much employed at the courts of France and Burgundy. The Fountain of Moses in the Carthusian Monastery at Dijon, in Burgundy, a work executed by him, dates from the year 1397, and is in a free and bold style, which indicates the beginning of a more delicate understanding of nature. This is exhibited with surprising vigor and definiteness in the monument of Philip the Bold, executed by the same master in 1404, and at present in the Museum at Dijon. The road is here opened toward that energetic realism in representation which, twenty years later, was introduced as a new conquering principle into painting by Hubert Van Eyck.

England also takes part in the plastic efforts of this period, although her architecture is but little adapted to decorations in sculpture. The façade of the Cathedral at Wells is a brilliant exception,

Fig. 405. Tomb Slab of Archbishop Peter von Aspelt. In the Cathedral at Mayence.

however. It has an extensive series of sculptures in the noble, severe style of the thirteenth century, in which the cardinal ideas of Christian doctrine—from the creation to the day of judgment, from the beginning to the end of time—are set forth. The style of the equally numerous reliefs which adorn the spandrels of the arches of the tri-

forium in the Cathedral of Lincoln is far more free and graceful; noble figures of angels in lifelike motion admirably filling the spaces.

Far more important in the history of English sculpture are the designs of its sepulchral monuments. In these, even at an earlier period, the position and character of the deceased were indicated and expressed with much delicacy of comprehension. These tombs are generally flat stones with reliefs, upon which the figure of the deceased is represented as in life, generally with crossed legs—a position in which we see an early manifestation of the tendency toward what is natural and realistic. Numerous works of this kind are in the cathedrals and other churches of the country. Several are in the Church of the Templars in London; and the tomb of Duke Robert of Normandy, the eldest son of William the Conqueror, in the Cathedral at Gloucester, is especially interesting by reason of its striking characterization.

Fig. 406. Tomb Slab of Duke Henry IV. In Breslau.

Tombs in other countries do not have the relative importance of these in England, although they generally indicate important periods of development in art. As a rule, they are simply tombstones, which, when let into the floor of the church, are covered either with very low reliefs, or else simply engraved with figures in outline, the lines of which are often filled in with some colored material. Occasionally, however, the stones were placed in the walls in an upright position; in which case the sculptures were brought out into bolder relief. There are conspicuous instances of this latter style in France, in the Crypt of S. Denis; in Germany, in the Church of S. Elizabeth at Marburg; and in the Cathedral of Mayence,* where, especially worthy of notice, is the monument of Archbishop Peter of Aspelt, who crowned the

* Excellent photographs of these sculptures are in the work of H. Emden, "Der Dom zu Mainz"; Mainz, 1857.

three emperors of Germany, Henry VII., Louis of Bavaria, and John of Bohemia; a circumstance of which the sculptor (Fig. 405) has availed himself in an amusing glorification of the Prince of the Church, who is portrayed as of colossal size, and quite overtopping the temporal princes. There is also in the Cathedral of Cologne, where various other monuments in the sarcophagus style show progress in sculpture, the beautiful Monument of the Archbishop Frederick von Saarwerden, who died in 1414—one of the most complete and superb works of its kind. Similar in treatment, and with rich polychromatic coloring, is the Tomb of Duke Henry IV., who died in 1290, in the Church of the Holy Cross at Breslau (Fig. 406).

Fig. 407. Tomb Plate in the Cathedral at Bruges.

Bronze-casting is chiefly used during this epoch for fonts, candelabra, lecterns, and other articles of church furniture; but it is also

quite often employed for tombstones (Fig. 407). Beautiful examples of monuments of this sort are the Tombs of King Henry III. of England and Queen Eleanora, in Westminster Abbey in London, executed by William Torell in 1290, and marked by a distinct and characteristic lifelike execution; also, in the later Gothic manner, the Tomb of the Black Prince in Canterbury Cathedral, executed after 1376, and others. Among examples in Germany, the most excellent is the Monument of Archbishop Conrad of Hochstaden in the Cathedral of Cologne. There exist, besides, a great number of bronze tomb-slabs in Northern Germany, Flanders, and France, as well as in Northern Scandinavia, on which the figure of the deceased is simply engraved in strong, deep-cut outlines, and surrounded by pleasing architectural forms, animated by designs of angels playing upon musical instruments, and by figures of the saints and apostles. Several flat tomb-slabs in Northern Germany exhibit successive stages of development. The oldest, in the Cathedral at Schwerin, is a double plate, representing two bishops (about 1347); following which is a double plate in the Lübeck Cathedral (about 1350). Further, there is a plate in the Church of S. Nicholas at Stralsund (1357); and, finally, the larger double plate in the Schwerin Cathedral, the most beautiful and magnificent of all. In this work, the style of ornamentation of the smaller figures, and of the graceful angels, seated among grapevines, and playing upon musical instruments (Fig. 408), is full of tenderness and charm; while the figures of the archbishops stand out in grand dignity and lifelike individuality (Fig. 409).

Fig. 408. Angel. From a Tomb Slab at Schwerin.

Carving in ivory was also much in vogue, during this epoch, for decorating small, portable altars, as well as for little caskets and other articles of worldly use, on which graceful pictures of the life of chivalry were designed in delicate reliefs (Fig. 410).

Still more extended is the employment of precious metals in the construction of costly receptacles for relics, representing small Gothic churches, the designs richly and thoroughly carried out, with buttresses and arches, finials, gables filled with open work and slender spires. More especially beautiful, however, were the various vessels

used in divine service—the chalices, ciboriums, censers, and monstrances, richly designed with architectural forms, and adorned with all the decorations of this luxuriant style.

Finally we come to the consideration of the numerous carvings in wood, which were employed more and more generally after the fourteenth century, especially in Germany, and more particularly in the decoration of altars. Better than anything else they teach us the use of color, the polychromy of mediæval plastic art. The Middle Ages delighted in the most extensive use of color, not only on these carvings in wood, but also on the stone figures used as architectural decorations either in the interior of churches or on tombs. It was, in part, the inner emotional life, seeking expression in these works, that called for the delicate softness of color to subdue the severity of form to a more soulful tenderness. Partly, also, the polychrome employed in architecture, and especially the many-colored, broken light which streamed in through the painted glass windows, required a carrying out of the same principle through the whole system of decoration. Thus we find the large altar shrines—which, when triptychs, often had their two wings extended still farther by an added pair — entirely covered with statues and reliefs; the latter shaded in perspective, looking like pictures carved in wood, standing out against a gold background, enclosed by richly-designed frames, and with canopies and vines overhead. Even the figures themselves, generally of small size, are attired in splendid gilded and damasked draperies, with borders and linings of brilliant colors, especially sky blue and red. The nude portions, especially the heads, are painted with a most delicate fidelity to nature; and it is only in the gilding of the hair that the style asserted its rights. The architectural frames of gold, red, and blue, are in perfect harmony; and the intermingling and combination of colors indicate a thoroughly practised taste.

Fig. 409. Head of a Bishop. From a Tomb Slab at Schwerin.

These carved altar-pieces, in which is achieved one of the most

brilliant triumphs of the Northern sculpture of the middle ages, first appear in the fourteenth century; and they gain steadily in favor until the close of mediæval art. We will only instance the Altar at Tribsees, in Pomerania, among works of this description, on which is an original although somewhat crude representation of the Last Supper.

Fig. 410. Carved Ivory Tablet.

The great mass of similar works in carved wood will be spoken of when we come to treat of a later epoch.

While the Gothic style furthered in this way the development of sculpture, the progress of painting not only was not promoted by the new movement, but was even decidedly retarded, since architecture, as we have seen, took away from her the great wall-spaces; so that mural painting fell almost entirely into disuse throughout the North, and was employed only exceptionally and in rare cases. The grand future which, during the dominion of the Romanesque style, appeared

to be opening before this branch of art, was thus irretrievably lost; and the Northern nations purchased the satisfaction of expressing themselves with full force in the Gothic style, by entirely sacrificing, for centuries, the power of representing their highest ideas in great productions through that very art which seemed best calculated for their embodiment. As a consequence, painting in the North was, for the most part, limited to minor art productions; and even as regards altar-pieces, her domain was curtailed by the prevailing preference for carved work. Hence a certain idyllic limitation grew up in

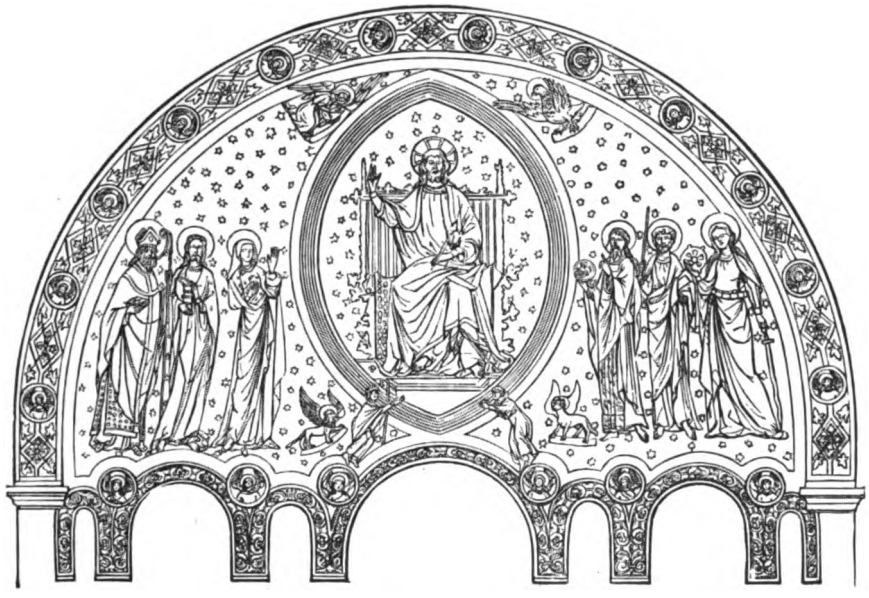


Fig. 411. Fresco in the Church at Brauweiler.

Northern painting: an excessive attention was paid to the expression of tender feeling, and the taste of the artist confined within narrow bounds.

Among the best known Gothic frescos are the pictures in the apse of the Church at Brauweiler, which belongs to an early period (Fig. 411), but especially the pictures on the vaultings and walls of the former Chapel at Ramersdorf near Bonn, all of simple and dignified beauty; the latter, especially, one of the most unusual instances of a completely developed series, ending with the Last Judgment. Other specimens exist in the choir of the Cathedral at Cologne and in the Church of S. Thomas at Soest. There is also a complete series of Biblical scenes in the Cloister Church at Wienhausen near Celle; also

considerable remains on the vaultings of the Church of S. Mary at Colberg, in the Cathedral at Marienwerder, and again in the Church of S. Vitus at Mühlhausen-on-the-Neckar. The Emperor Charles IV. appears to have desired to assign a more important position to mural work in color; but his fancy for costly materials led him to give special prominence to mosaic work, which was by no means favorable to a freer development of realistic art. Specimens of this style are the great representation of the Last Judgment on the south side of the Cathedral at Prague; also a portion of the pictures in the Wenzel Chapel of the same cathedral, as well as pictures in the church and in both the chapels in the Castle of Karlstein in Bohemia. The large fresco of the Last Judgment in the Church of S. Philibert at Tournus may be mentioned as an important work of this kind in France; and the recently uncovered paintings in the Church at Gorkum in Holland are examples of an early period.

Whatever was lacking, however, in artistic effort and material in other ways, was atoned for by the attention given to glass-painting. If in the preceding epoch an attempt had been made to decorate the simple Romanesque windows with color design in glass, how much more must the tendency to this mode of ornamentation now increase, when space and opportunity for the most extended representations were offered by the wide, high windows of the Gothic style! The simplest design was to surround the rich-patterned, tapestry-like window with representations of figures, as with a beautiful border. Sometimes, however, complete scenes of Biblical and legendary subjects were spread over the entire surface, but in such a way as admirably to repeat and enforce the Gothic architectural forms. This branch of art was, however, hemmed in by so many limitations—not only by the general architectural divisions, the intersections made by the mullions and the tracery, but also by the clumsy, awkward, mosaic character of the mechanical execution—that its works were made effective only by the wonderful glow and harmonious splendor of the coloring, as well as by the dignity of conception and treatment of single figures. How imperatively necessary are severe architectural limitations in these works is shown by the experience of the succeeding epoch, which sought to cut loose from all hindrances, and to cultivate a freedom of composition which is denied to these productions. Glass-painting was carried to especial perfection during the thirteenth century in those regions of France where the Gothic style originated and was developed. The greater number of the cathedrals here, especially those at Chartres, at Rheims, at Rouen, at Bourges, at Tours, and at Le Mans, contain superb examples; so also the Ste. Chapelle at Paris. In Germany, paintings on glass are unusual in the thirteenth century;

and the art attained a vigorous growth only in the fourteenth century, of which we have numerous instances, extending far down into the fifteenth. The noblest specimens are the windows in the choir of the Cathedral at Cologne, of the Strasburg and Freiburg Minsters, of the Cathedral at Regensburg, the Church of S. Katharine at Oppenheim, the Church of S. Martha at Nuremberg, and the Church of S. Dionysius at Esslingen, and others. The glass windows of the Convent Church of Königsfelden in Switzerland rank high among

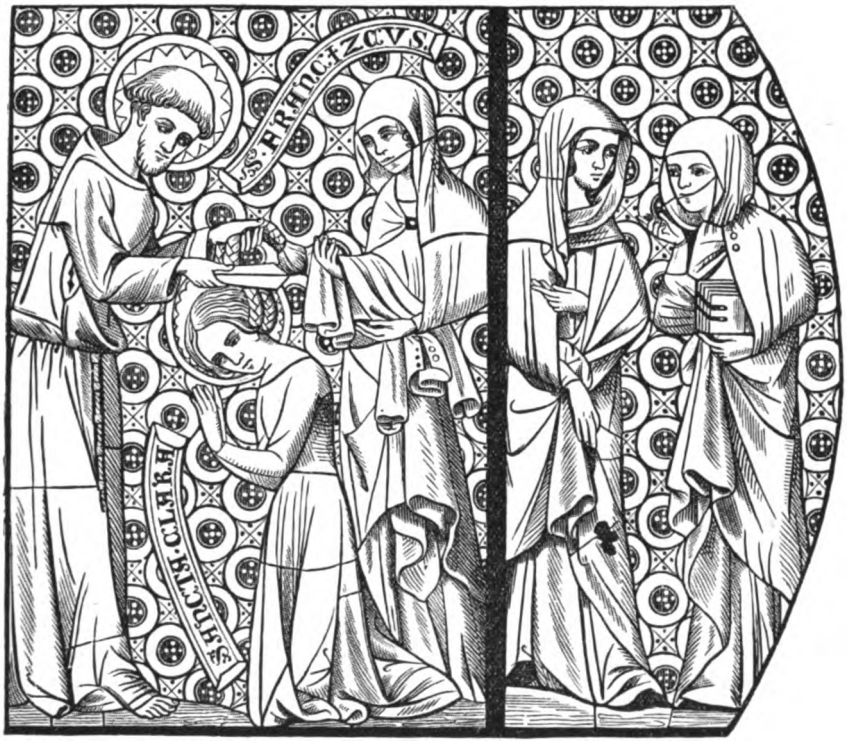


Fig. 412. Glass-Painting at Königsfelden.

the productions of the fourteenth century (Fig. 412). The paintings on glass of the Cathedral of York in England, and of the Cathedrals of Toledo and Leon in Spain, are also celebrated.

France also, during the earlier period of Gothic art, far exceeded all other countries in the art of the illumination of manuscripts. In the art of "illuminating," as it was called in Paris, the masters of that city were widely celebrated. This occupation went hand-in-hand with the development of learning, which gave to the University of Paris the first rank in the world; and it attained, through the constant pro-

duction of such works, to an evenness of style, to a successful technique, and an elegant elaboration. Gothic art imparted to it fixed architectural laws; and painting on glass, now greatly cultivated, obviously influenced the methods of representation; so that the veriest externals, such as the broad black outlines, were repeated from

Fig. 413. Painting from the Mannessian MS., Paris.

it. An especially beautiful psalter, said to have been designed for S. Louis, in the Library at Paris, which is richly adorned with miniatures, is especially worthy of mention. It contains numerous scenes from the Old Testament, simply and distinctly portrayed with strong and harmonious coloring on a gold ground, inclosed by a frame of severe Gothic architecture. But in this case, as in that of almost all

French productions, skillful technique and rich decorative effect are sought even at the expense of originality and delicacy of sentiment.

It is otherwise with German illuminations, which were especially employed during this period in the illustration of secular poetry, chiefly that of the minnesingers. They are generally executed in an unassuming style, in lightly shaded pen-drawings, displaying a freshness of sentiment and a *naïve* artlessness which are in perfect keeping with the feeling of the poet. One of the most charming illustrations of this kind is in the Munich Library—the Manuscript of Tristan by Gottfried of Strasburg, which seems to have been executed before the middle of the thirteenth century. There is a total lack of understanding of anatomy; but in the attitudes a just feeling is expressed, and there is a child-like earnestness in the expression of the heads. The figures are drawn in white upon a colored background; but the shading of the draperies is in colors. The pictures in the manuscripts of the minnesingers show still more distinctly the char-

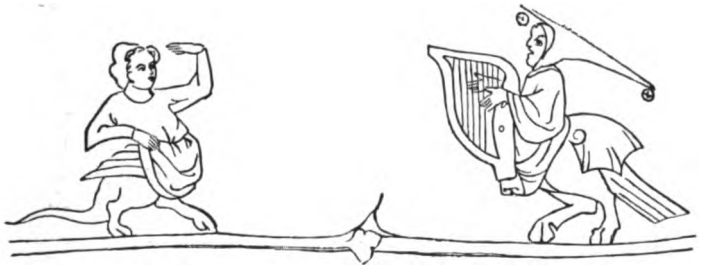


Fig. 414. Border. (From a Bible at Stuttgart.)

acteristic tendency of the Gothic style: for example, the Weingartner Manuscript in the Royal Library at Stuttgart, from the second half of the thirteenth century; also the numerous pictures in the Mannessian Manuscript in the Library at Paris (Fig. 413); finally, in the manuscript of William of Oranzee of the year 1334, in the Library at Cassel, which shows in an especially attractive manner delicately designed figures on backgrounds either of gold or of a tapestry pattern. When in the illuminating of Bibles, Psalters, or the Gospels, representations of sacred scenes were to be given, free artistic humor could not refrain from peopling the gayly colored branch-work running round the pages of the books with wonderful and delightful creations of fancy, in which a frank and merry fancy often finds expression in the most charming play of humor. There are extremely clever drawings of this kind in a manuscript in the Berlin Museum, and others no less original in a Bible of the fourteenth century in the Public Library at Stuttgart (Fig. 414). A style of illuminating re-

sembling this appeared in Bohemia during the course of the thirteenth century, numerous instances of which, full of life and originality, occur in an illuminated Bible in the library of Prince Lobkowitz at Prague.

Germany also far exceeded all other Northern countries in the amount and variety of the painting on panels; especially after the middle of the fourteenth century, when this style of art was extensively practiced. These painted panels were used sometimes as doors to altar shrines, the principal feature of which often consisted of a carving in wood; but very frequently the most conspicuous feature of the altar back itself was a painting, which could be inclosed by means of two wings, or leaves, painted on the inside as well as on the outside. When the altar-piece is closed, the exterior usually shows some single figures; as, for example, the Annunciation, or saints especially revered. When the leaves are open, the large middle tablet, with the two inner sides of the wings, either represent a whole connected series of separate scenes—perhaps the life of the Blessed Virgin, or the Passion—or else the middle piece contains a single larger representation, to which are added smaller scenes on the wings. Such a threefold series of paintings is generally called a triptych; and the word is used to cover even those great compositions in which there are more parts than three. Thus the Adoration of the Spotless Lamb, at Bruges, is the central painting of a group of twelve separate designs, all meant to be visible at once, the decoration of the outsides of the wings not included. Generally the paintings are executed on the wooden tablets (which were prepared for this purpose with a fine, strong priming of chalk) in *tempera;* that is, the colors, finely ground, were mixed with some glutinous adhesive, such as white of egg. This material was favorable to a delicate, careful finish of execution. The coloring is generally tender and light, and set off by the frequent use of gilding. The disposition constantly increased to copy in the costumes the dress of the period, with its splendid adornments of gold, pearls, and precious stones. But the representations still stand out sharply from a figured gold ground, which does away with any idea of nature, and gives an ideal character to the whole conception.

Much as these works are influenced by the universal tendency of the time, with its soft sentiment and spirituality, yet after 1350 special characteristics and original, independent schools are developed within these fundamental laws; the earliest among them being that which came into prominence in Bohemia in the reign of the art-loving Emperor, Charles IV. We have already glanced at the numerous frescos in Prague and Karlstein. But there are also panel-paintings here, as well as in Vienna and Prague. Nicholas Wurmser of Stras-

burg, and two artists of Prague, Kundze and Theodorich, are known as the artists of these works. The predominant characteristic of their art is an excessive delicacy, which in their drawing of form almost degenerates into weakness, but which in expression often conveys great depth and tenderness. The colors are applied with much delicacy, and with very soft gradations, but the forms are generally broad, and even clumsy; for instance, the noses are almost always round and thick, the lips very full, the eyes large, and their expression is more open than profound. Moreover, the carriage of the figures is generally awkward, and harshly distorted by the high shoulders and the short neck. The Church at Mühlhausen-on-the-Neckar has several frescos and panel-paintings in the latter style of this school, presented by a citizen of Prague in 1385.

That the same delicate style was also cultivated and developed in Austria by able artists is proved by the graceful paintings, full of feeling, which adorn the reverse of the altar at Klosterneuburg. Donated about 1325 by the art-loving provost Stephen von Sierndorf, they depict in admirably composed representations, abounding in figures, the Death and the Coronation of Mary; Christ's Death on the Cross, with an expressive group of the Holy Women; then Christ appearing after his resurrection to the Holy Women, and meeting Magdalen in the garden. These pictures, executed upon a richly figured gold ground, rank with the most precious creations of the time, for within the general character of the style they reveal an independent artistic power, capable of imbuing the forms with an individual life, and succeeding uncommonly well in perfecting the figures by a richly graduated modeling.

The school of Nuremberg is of greater importance, its culminating period extending from the middle of the fourteenth century. Painting was, in this school, emphatically subordinated to the influence of the immense activity in sculpture which we have reviewed above; and it endeavored, by means of painstaking drawing and careful modeling, and attention to form, to compete with its sister art; while at the same time a vigorous coloring preserved the distinctly picturesque effect. The figures are graceful and lithe, and, in spite of a certain conventionality, have a marked freedom of action. The heads express a tender depth of sentiment. The Imhoff altar-piece, originally in the Church of St. Lorenz, now in the Castle, is one of the most important works. Its principal picture is a coronation of the Virgin (Fig. 415). The noble disposition of the draperies, the profound expression, the grace of the figures, associated with a vigorous modeling, suggest repeatedly the sculptures to which we have referred above; so that we may decide that this work dates from a time later

than 1361, and before the close of the century. The later productions of the school are recognizable by a somewhat crowded arrangement of the figures. This is seen to be the case in Tucher's great altar-piece in the Church of our Lady, painted in 1385, on which are represented the Annunication, the Crucifixion, and the Resurrection; while on the wings are the birth of Christ, and figures of the two great apostles, S. Peter and S. Paul. The Volkamer altar-piece

Fig. 415. Coronation of the Virgin. (The Imhoff Altar-Piece, Nuremberg.)

belongs to the beginning of the fifteenth century. It is in the choir of the S. Lorenz Church, and has pictures illustrating the legend of S. Theokar, and the life of Christ; also the Haller altar-piece in S. Sebald's Church, with a crucified Christ between the Virgin and S. John, as well as several figures of saints. The school of Cologne is of a more recent date than these, but on that very account more highly and more purely developed. The character of this school was also undoubtedly determined in a very great degree by the plastic works,

which show great grace here as early as the beginning of the fourteenth century. There appears, however, to have existed here an especial artistic activity from a very early period, the results of which, in the domain of painting, were the most important of their time and style. The gentle, thoughtful sentiment which is embodied in the figures of the Gothic style was never so admirably expressed in painting, was never so profoundly appreciated, as here; hence the masters of Cologne are the purest exponents of that soft, pleasing style. For this reason they exercised such a decided influence throughout the neighboring regions, and even throughout all Northern Germany; but on this very account their style is generally marked by conventionalism. The school of Cologne, like that of Prague, has as its original motive delicacy of conception and tenderness of treatment; but it unites with this a firm feeling for noble forms, for grace of demeanor, and for depth of expression. A soft gradation of the light and yet solid coloring, a child-like purity and sweetness, give to the better works of this school a charm of devoutness and sanctity such as is not seen in any other in such perfection, purity, and entirety. It is true that these painters have their limitations. They excel in portraying youth and womanhood, and this in their aspects of humility and dependence; they have little gift for portraying strength and manliness, and none whatever for passion. These are, however, in truth, the limitations of the time, the positive side of which—its truth and its beauty—shines out with all the greater brightness.

The most important works of the school of Cologne are connected with the names of two masters, who illustrate the two principal epochs of its development. Master William von Herle, who is praised in "The Limburg Chronicle" of the year 1380, as "the best painter in German countries," is the earlier. He is remarkable for a child-like innocence, a tenderness of sentiment, and a radiant purity of expression embodied in graceful, slender forms; and for an exquisite softness of coloring, which gives to earthly things a kind of divine halo. "The soul is all expressed; the body scarcely at all." The heads have a graceful oval form; the nose is long and slender; the mouth small, full, and lovely; the forehead high and pure; the eyes, always set rather close together, have a soft, dove-like expression. The Clara Altar, now in the Chapel of S. John in the Cologne Cathedral, with numerous scenes illustrating the childhood and the passion of Christ, is among the chief works of this master; as are also remains of wall-paintings in the Hanse Hall of the Rathaus.

The second master is Stephen Lochner, whose name has been handed down to us in Albrecht Dürer's "Journal of his Travels in the Netherlands," and with whom is associated the greatest painting

produced by the Middle Ages. This is the celebrated cathedral picture, painted after 1426, once in the Chapel of the Rathhaus, now in

Fig. 416. S. Ursula. One of the wings of the Dombild, by Master Stephen. From the Engraving by P. Massau.

a choir chapel of the Cologne Cathedral. The principal field represents the adoration of the three kings; and on the wings S. Jerome is seen with his followers, and S. Ursula with her companions (Fig.

416), these being the two patron saints of the city; on the outside is the Annunciation. Stephen follows in the steps of his predecessor. He is filled with the same deep devotion and innocence, and clothes these qualities in the same noble forms. He imparts to them, however, an air of greater reality, by means of more vigorous modeling,

Fig. 417. The Virgin of the Rosebush, by Master Stephen, Cologne.

greater depth of coloring, and by the use of the gorgeous costumes of the day, yet without sacrificing the exquisite tone of ideality which envelops all the figures conceived by the art of the Middle Ages as with a hallowing atmosphere. Thus the art of that period attains its highest culmination in his wonderful pictures.

IN ITALY.

The art of sculpture in Italy sought after and attained, during this period even more than during the preceding, a position independent of architecture. As the Gothic had here a system far less minutely elaborated and less universally accepted, it exercised a less rigid control also over this other art. Moreover, a sentiment of individuality was at an early day so far aroused in the artists themselves, that they were less disposed to subject their works so entirely to the dominion of that community of purpose and labor which made the glory of the Northern school of architecture. Added to this, several of the most celebrated and most influential artists of the period were proficient in all three arts, or at least in those of painting and architecture; from which fact there resulted a new adjusting of the bounds and requirements of the separate branches. Wherever sculpture is united with architecture, in Italy, it is done in an unforced way, each artist working for his own sense of sculpturesque beauty with a view to artistic effect. In the case of painting, full provision was made for it in the entire organism of the buildings; so that on the ample surfaces of the walls and vaultings this art could unfold itself in that magnificent freedom of conception and of composition which, as time went on, necessarily raised it to an undisputed superiority over the painting of the North.

Niccola Pisano is named above in the section on Romanesque architecture. The first work of his riper manhood, the glorious pulpit of the Baptistery at Pisa, dates from the year 1260. Six pillars, with a seventh in the center, resting on lions and other figures, and united by Gothic trefoil arches, support the superstructure with its balustrades, approached by a staircase; so that the whole gleaming marble edifice forms a work complete in itself. Small statues stand on the elegant foliated capitals, and form the angle pieces of the hexagon; and close by, on the spandrels of the arches, are figures of prophets, evangelists, and allegorical personages, in bold relief. But the chief scenes are the rich reliefs on the sides, representing the Nativity, the Adoration of the Three Holy Kings (Fig. 418), the Presentation in the Temple, the Crucifixion, and the Last Judgment. They are rich in figures, and composed in the style of the reliefs on the Roman sarcophagi. But the inward, even more than the outward, expression of these figures breathes the spirit of antique art. In the Birth of Christ, the Madonna rests on her pillow with the dignity and conscious supremacy of a Juno; and in the Adoration of the Magi she has the air of an empress on her throne, receiving the meet tribute of subject

princes. These are conscientious, most impressive studies from the antique, which is revealed line by line in the treatment of the figures. And we still find motives among the Roman sarcophagi of the Campo Santo which afforded a model to the great regenerator of sculpture. In the treatment of the nude, which prevails in his Last Judgment, he displays a wealth of resource unknown to antiquity, united with a complete knowledge of form. All that he thus conquered for his national art was an imperishable good, and became the broad, firm basis of all after-development. Although the profuse life and conscious beauty of his figures may be so far removed from Christian devotion and humility as to cause a wide gulf between subject and con-

Fig. 418. The Adoration of the Three Kings. Relief from Niccola Pisano's Pulpit in the Cathedral of Pisa.

ception, although the succeeding age ushered in a natural reaction against this unconditional glorification of the antique, still the antique spirit has continued to be the inalienable inheritance of Italian art ever since the days of Niccola Pisano.

In sculpture, Giovanni Pisano, the son of the great Niccola, was the chief agent in the introduction of the new era. He was born in 1245, and died in 1321; and his early life was dedicated to completing the later works of his father, especially the pulpit in the Cathedral at Siena. If even in these works a newly awakened sentiment prevails, opposed to the calmer, dignified beauty of Niccola's more an-

tique manner, this trait appears still more strongly and decidedly in Giovanni's own creations. This change may have had its origin in the universal tendency of the age; but the presence of numerous fragments of antique sculpture seems also to have had its influence. But Giovanni did not take up the new style with the same gentle depth and tenderness with which it was practiced in the North. On the contrary, he knew how to apply his greater freedom and vividness to the expression of dramatic passion and deep emotion, and united to these qualities an unusual amount of intellectual motive in his composition.

The high altar of the Cathedral of Arezzo, dating from 1286, is in this master's earlier manner; an especially elaborate work, repre-

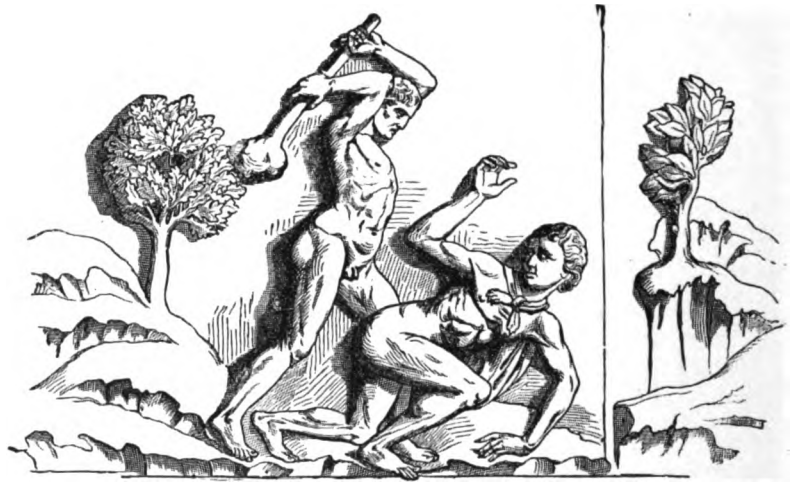


Fig. 419. Cain and Abel. From the Cathedral at Orvieto.

senting in a multitude of reliefs and small statues the legends of the Virgin and of other saints, as well as the figures of apostles, prophets, and angels, in a noble, flowing, and free style, full of life and movement. Another of his earlier works, in which he received the assistance of pupils and workmen from 1290 on, is the extensive series of sculptures on the façade of the Cathedral at Orvieto, the execution of which belongs to the close of the thirteenth century.* These representations are not grouped within an architectural framework, as in the Northern cathedrals, but in freer, more picturesque arrangement: relief sculptures covering vast, unbroken surfaces of the piers,

* Engravings of these sculptures have been published by Gruner; but the reproductions are accurate only in the general disposition of the groups, all the expression of the figures being lost.

sometimes framed in delicate vine traceries, and extended in vigorous succession over the four great wall-surfaces, between and beside the doors. The Bible story, from the fall of man down to the redemption and the last judgment, is given in sequence. There are numerous evidences of Niccola's manner; but other portions show in their more intense and dramatic conceptions the uprising of a younger school (Fig. 419).

The pulpit in the Church of S. Andrea, in Pistoja, is in a still more intense and passionate style, although not more free from overloading. This pulpit was finished in 1301, and, like all earlier similar works, is supported upon beautiful marble pillars borne by lions. The spandrels of the arches and the panels are decorated with a profusion of finely executed reliefs and small statues. Here are the Birth of Christ, the Adoration of the Magi, the Slaughter of the Innocents, the Crucifixion, and the Last Judgment, somewhat confused, overladen, realistic even to harshness and ugliness, but powerfully impressive and full of vigorous life; the treatment of the single figures free and noble, and not without a hint of the antique.

After the year 1304, Giovanni executed in the Church of S. Dominic, at Perugia, the Tomb of Pope Benedict XI.; and in 1311, the pulpit of the Cathedral at Pisa, which was, however, destroyed at a later period, and now exists in fragments only.*

A great number of scholars and disciples attached themselves to Giovanni. Numerous altars, pulpits, and funeral monuments, scattered throughout Italy, testify to the overwhelming influence of this master, who may justly be called the father of his epoch. The center of artistic activity, even at this time, was Florence, whose great master Giotto (1276-1336), with his universal genius, gave an immense impetus to sculpture by the active part he took in it. For the Campanile of Florence, built by him, he not only designed the bas-reliefs with which it is decorated, but also assisted in putting his designs into execution. On this beautiful tower the history of man's development is set forth in a series of small reliefs spiritedly executed, and in symbolical order. As Miss Horner has stated, "the basement story is decorated with bas-reliefs. Two on the northern face, representing sculpture and architecture, were executed by Giotto himself; the remaining five on this side are by Luca della Robbia, after Giotto's designs; and all the rest are by Andrea Pisano." These reliefs, in small hexagonal panels, deal with symbolical subjects, mythological subjects and Christian legendary subjects curiously inter-

* By the enterprise of the South Kensington Museum, casts of all the fragments of this pulpit have been made, and the whole set up in the court of the museum, where it can now be seen, and photographs of it procured. The pulpit, erected by Niccola Pisano in Siena, is still in place, and in perfect preservation.

mingled. The panels of the second row are lozenge-shaped and present the seven cardinal virtues, the seven sacraments, the seven works of mercy, and the seven necessary labors of man. Above the basement is a row of statues in niches; some of Giotto's own time; the most perfect instance of wholly independent and realized figure sculpture used in connection with Gothic forms.

Under the influence of Giotto, Andrea Pisano (about 1270 to 1345) arose to an independent and important position as a master. He assisted in executing the reliefs on the Campanile under Giotto's

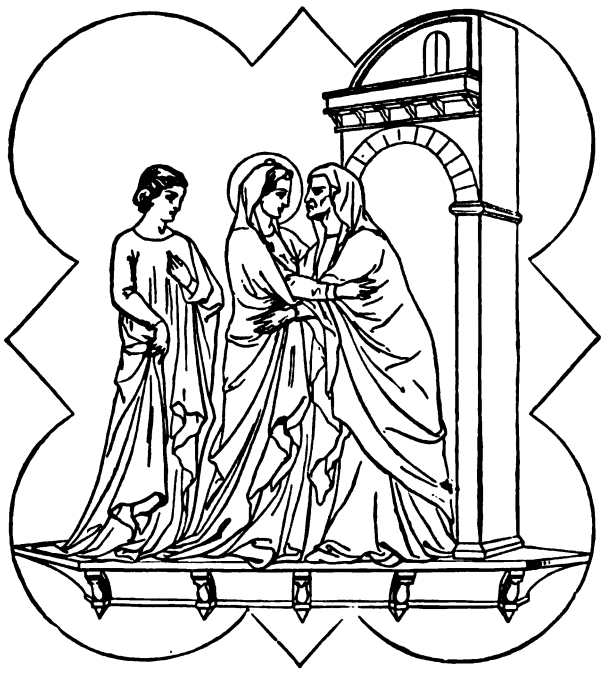


Fig. 420. Relief from the South Door of the Baptistery at Florence. By Andrea Pisano.

guidance. But his own masterpiece is preserved to us in the southern bronze door of the Baptistery at Florence, dating from the year 1330; without doubt one of the noblest works of this kind. The events in the life of John the Baptist, and also representations of the Virtues, are here given in twenty-eight panels, gracefully bordered, and in severe architectural arrangement. They are treated in an incomparably simple and severe style of relief. With the fewest possible means, and with the employment of two or three figures, every incident is described in a clear and lifelike manner; and the figures are

in the highest degree free and unconstrained (Fig. 420). About the same time (1330), the two Siennese artists, Agostino and Angelo—who worked in concert, and had already assisted Giovanni Pisano on the Cathedral at Orvieto—executed the Monument of Bishop Guido Tarlati in the Cathedral of Arezzo, which contains sixteen scenes in relief from the life of the dead man, besides a number of allegorical figures; and is one of the most comprehensive creations of that time. A very remarkable artist, Andrea di Cione (better known as Or-

Fig. 421. The Betrothal of the Virgin. From Orcagna's Shrine in Or San Michele. After C. C. Perkins.

cagna), who also attained great results in all three arts, marks the close of Florentine sculpture of this period (till 1376). His masterpiece of sculpture is the magnificent Tabernacle in the Church of Or San Michele in Florence (1359) one of the most splendid pieces of decorative art in the world. It is decorated with bright-colored mosaic patterns, besides a profusion of reliefs, illustrating the life of the Virgin, with single figures of the prophets, saints, and angels; the

whole expressing the Gothic devotional feeling with extreme grace and noble simplicity (Fig. 421). During this period there was also great activity displayed in sculpture in the other provinces of Italy, from Venice to Naples. The names of many artists have been preserved to us, and many splendid and incomparable works were executed. The churches of Naples, especially Santa Chiara and San Giovanni a Carbonara, contain a number of magnificent monuments of the princes of the house of Anjou; such are the tomb of King Robert, erected in 1343, more effective architecturally than in the separate pieces of sculpture, and several other tombs of strongly Gothic character ascribed to the little known Masuccio. These, on the whole, fall short of the spirit and delicacy of the Pisan school. Sculpture displayed a much richer, and, to a certain extent, a more independent activity, in Lombardy and Venetia than in the south; although, to be sure, we find a great many Tuscan artists employed there.

Thus, Giovanni di Balducco of Pisa erected in 1339 the splendid Monument of Peter Martyr for the chapel of that saint in the Church of St. Eustorgio in Milan—a marble sarcophagus, decorated with reliefs and statuettes, supported upon pillars, and with a beveled top. In the same church, the reliefs on the high altar, of scenes from the Passion, in a very animated style, are more indicative of an activity in sculpture than are the rather contracted Monuments of the Visconti in the side chapels. The Tomb of Barnabo Visconti (1354), in the Archæological Museum of the Brera, is original in design, with its clumsy equestrian statue. The Monuments of the Scaligers, at Santa Maria Antica in Verona, are more important; but they are of more value for their general effect as architectural designs than for their separate sculptures, whether of human subject or of pure decoration. The delicacy and firmness of the architectural details are only to be matched by the grace and spirit of the general design. The finest of all is probably that of Mastino II. (d. 1351); but the tomb of the most famous member of the house, Can Grande (d. 1329), which is erected over the entrance door of the church, is inferior only in that it is smaller and less sumptuous, while it cannot surpass in refinement or in power the larger work. Can Signorio erected his great tomb during his life, and it was probably finished about 1380. It is far inferior to the others in beauty, although much larger and more costly. Equestrian statues of the dead appear as the crowning figures on these monuments also; the most conspicuous example being the Tomb of Can Signorio. The rich sculptures of the Doges' Palace in Venice, coming down to about the middle of the fifteenth century, including the splendid decorations of the Porta

della Carta, are Gothic, although they contain slight hints of a transition to the Renaissance. The sculptured capitals of the south front on the harbor are of singular interest because philosophical and ecclesiastical ideas as held in the fourteenth century are mingled with the loveliest sculpturesque thought. The front on the piazzetta contains later repetitions of the same ideas. The magnificent groups at the angles—the Judgment of Solomon, the Drunkenness of Noah, and the Fall of Man—are each reinforced and emphasized by capitals of very great size, and of great richness immediately beneath them. The beautiful statues of the Madonna, of St. Mark, and of the apostles, on the lectern of the principal choir in the Church of St. Mark, belong to this period. To conclude, one of the finest of these works in the Arca (Tomb) of S. Augustine in the Cathedral at Pavia, of the year 1382, richly adorned with reliefs and statuettes. The composition is supported upon pillars, surmounted by a stately canopy, and entirely covered with decorations in sculpture, even to the interior of the canopy.

Painting is a more favorite art than even sculpture with the Italians at this period; and to it the creative spirits of the day turned with especial interest. The results attained by a previous age in this domain of art are merely beginnings out of which the marvelous flower of Italian painting, now for the first time, bloomed with ever-increasing magnificence. Painting was not now confined, as it had been in the north, to narrow altar-pieces, flat and undeveloped figures on rough stone walls, and the limited and labored technique of painting on glass; but it could now express exhaustively the whole scope and depth of Christian thought on the broad surfaces of walls and vaultings necessarily conceded to it by architecture. It could now, even in the most extended and permanent undertakings, have an eye to great general effects; it could learn to work boldly and freely on a broader plane; and could prove, with its full strength, that it was, in a special sense, the art of Christianity. In taking a rapid survey of the importance attained by this art in Italy, we willingly forget the want of consistency in her Gothic architecture, which indeed was largely instrumental, by means of the very peculiarities which separated it from the Gothic of the North, in paving the way for the development of painting.

To the thirteenth century belong the mosaics in the apses of S. Giovanni and S. Maria Maggiore, both executed, according to the inscription, by Jacobus Torriti. The latter, the Coronation of the Virgin, is a grand composition, a soft and noble metamorphosis of the old type. While these latter works belong to the close of the thirteenth century, the Baptistery at Florence possesses valuable ex-

amples of the early and middle part of the century in the extensive mosaics, which were designed for the choir by a monk named Jacobus, in 1225, and for the great main dome by Andrea Tafi, and his assistants. Here, again, we note plainly the struggle of a new and more natural spirit with the stiff Byzantine model. The same is true of the mosaics in the apse of the Cathedral at Parenzo, in Istria, on the eastern shore of the Adriatic, which represent the Virgin on a throne, surrounded by saints and angels.

The center of this art culture was Tuscany, where painting was fostered in different directions by two great local schools. The Florentine masters, especially, took in the life around them with a comprehensive glance, and united with this fresh observation a thoughtful representation of the sacred history, as in the lives of Christ, of the Virgin, and of the saints; but they also have produced compositions of a mysteriously symbolic character, which are full of numerous lifelike traits, and for which Dante's wonderful poem gave many suggestions.

Fig. 422. Angel. From Cimabue's Madonna in Santa Maria Novella.

Cimabue, named in the chapter on Romanesque art, is the first recognized master of the Florentine school, and it has been noted that he represents at once the old Byzantine feeling and the protest against it. The former influence is especially noticeable in a large picture of the Madonna, originally in Santa Trinità, and now in the Florentine Academy. In an earlier one, on the contrary, in the right wing of the transept of Santa Maria Novella, the master's art rises to grand beauty, which is united with a touch of more agreeable grace in the angels around the main figure and in the medallions of the border (Fig. 422). He painted an extensive series of mural pictures on the vaulting and upper wall-spaces of the upper Church of St. Francis at Assisi, which are still most lifelike, despite their bad state of preservation.

The great Giotto, whom we know already as an architect and sculptor, is the strongest master of this time; and his industry is shown by magnificent compositions scattered throughout Italy, from Venetia to the territory of Naples. Giotto's immense power is not to be judged by those who compare the anatomical correctness of his figures with similar work by later men. The artists who followed

Giotto rapidly gained in knowledge of the external facts of nature; but it was Giotto who inspired the later men with his spirit, and it is curious to see how commonly the accepted types of the important Biblical stories, as told in painting, were fixed, once for all, by the fourteenth-century masters. Giotto's mighty influence long left its impress upon the Italian art of his age. It is only in covering large spaces that his genius finds full expression. He always aims at what is essential and characteristic—at convincing clearness in depicting incidents, energetic delineation, and strong dramatic life. These traits are preëminently characteristic of his works, and are united with complete skill in the proportioning and arrangement of large compositions and extended series of pictures. With these traits, which he sets forth with his whole strength, the representation of single figures becomes almost a matter of indifference; and even beauty is not essential. The type of his heads is not entirely realistic; the traditional forms still exert their influence upon the designer; yet these heads are of an impressive, if not of a wholly attractive style. There is an undeniable trace of the slender, long, Byzantine faces and figures; but the inspiration of genius imparts to these a novel, youthful, and spirited strength. The artist seldom succeeds in portraying the passionate emotions—anger, hate, or rage—in his faces. Such attempts on his part are very apt to result in grimace. But in their attitude and grouping his figures admirably express every emotion; not only depth of feeling, but the stormy emotions as well, are depicted with striking power.

His greatness and importance are shown by three principal works. He executed, under the patronage of Enrico Scrovigno, soon after 1303, the almost endless series of pictures in the Church of Santa Maria dell' Arena (commonly called the Arena Chapel), at Padua. This is a long, single-naved building with a vaulted ceiling, the entire wall-surface and the vaulting of which he covered with pictures, representing the histories of Christ and of the Virgin, the Last Judgment being painted over the entrance door. Giotto proved himself in this production to be one of the greatest masters of any age. He freed from its bonds whatever had before him been conventional; went straight to the root of things, and seized upon the soul of an incident. Moving, stirring, profound, giving full expression to every sentiment of the soul, he throws a lofty dignity around the simplest, most unstudied effects. With his deficiency in accurate anatomical knowledge, he produces his effects by mere general indications; and it is something the same with color, which he uses in pale tones and with slight modeling. But, notwithstanding this, his power is striking, and the effect produced is irresistible. He has, besides, a sur-

prising insight into actual life, out of which he draws picturesque motives, which he treats with such dignity that they do not clash with the sacred, elevated, historical character of his subjects, and, in fact, bring this out into still greater prominence. In this spirit are the scenes where Joachim approaches the shepherds in the field, in great tribulation; where, returning, he embraces his wife in happy emotion; as well as others. Many express passionate feeling; as where St. John with arms extended above the corpse of his beloved Lord, appears about to throw himself upon it (Fig. 423).

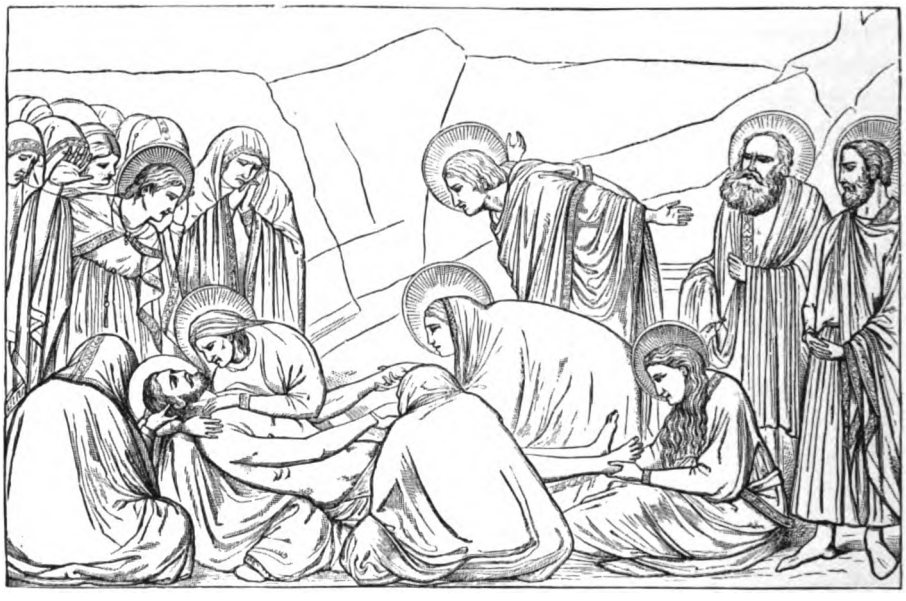


Fig. 423. The Entombment. From Giotto's Fresco in the Arena Chapel at Padua.

The pictures on the vault over the altar of the Lower Church of San Francesco at Assisi form another important series. The four pendentives of the vaulting contain grand, deeply symbolical creations, crowded with figures, in which are symbolized the three vows of the Franciscan order—Poverty, Chastity, and Obedience; and the Glorification of S. Francis is also given. The artist has here imparted to the dry allegory a breath of life and freshness, and has also clearly demonstrated his skill by the noble and harmonious filling up of the space.

The great monastic Church of Santa Croce in Florence has a number of frescos by this great master, recently brought out from under

a coating of whitewash. In the first chapel south of the choir (the Bardi Chapel) is the history of S. Francis; in the second (the Peruzzi Chapel) are the lives of S. John the Baptist and S. John the Evangelist, in masterly style; as well as an altar-piece, the Coronation of the Blessed Virgin, in the Baroncelli Chapel, at the end of the southern transept. The beautiful Last Supper, in the former refectory adjoining Santa Croce, is also by him or by a pupil.

In Rome, the porch of S. Peter's Church has a large picture in mosaic, executed after a design by Giotto, in which, according to accepted symbolism, the Church of Christ is represented by the ship of S. Peter tossed upon a tempestuous sea. While demons increase the fury of the storm, Christ, walking upon the waves, brings help and consolation, and extends his hand to the sinking Peter. This was of course executed for the earlier church, the basilica; and was preserved and removed to the narthex of the existing church. The interesting paintings discovered about 1840, and then thought to be by Giotto, including the portrait of Dante as a young man, are now generally admitted to be of a time subsequent to his death.

Among the few panel-paintings by Giotto, we must notice a series of twenty-six pictures which he executed for the sacristy presses of Santa Croce in Florence. These are almost all preserved in the Academy at Florence (where there is also a large magnificent altar-piece formerly in the convent of the Ognisanti), although there are several in the Berlin Museum. These small, miniature-like pictures, the themes of which are the lives of Christ and of St. Francis, display Giotto's usual distinctness and animated suggestiveness of narration.

An extraordinary profusion of paintings, especially of frescos, in the churches of Florence and other Tuscan cities, shows how absolutely Giotto dominated the painting of his day. The chapels, chapter houses, and sacristies of the great monastic churches—as of Santa Croce, Santa Maria Novella, Santa Maria del Carmine in Florence, and San Francesco and the Campo Santo in Pisa—are rich in works in this style, often displaying Giotto's methods in broad treatment and masterly composition. Taddeo Gaddi is one of his most important pupils whose names have come down to us; he is the artist of the Life of the Blessed Virgin in Santa Croce. So also Spinello Aretino, who decorated the Sacristy of San Miniato with interesting scenes from the life of St. Benedict (Fig. 424). Still another is Niccola di Pietro. The last two belong to about 1390. Among the grandest cyclic representatives of this school, the paintings in the chapter hall of S. Maria Novella, the so-called Capella de' Spagnuoli, executed about 1355, are particularly noteworthy. Their sub-

ject is the glorification of S. Dominic and his order, but they begin with the Redeemer's Progress to Golgotha, the Crucifixion, the Resurrection, and Ascension; on the wall to the right the spiritual and temporal power are represented by the Pope and the Emperor, together with the high clergy and the secular princes; and under their protection S. Dominic and his followers are seen teaching the faithful, and guarding them from heresy. On the left S. Thomas Aquinas appears enthroned, at his feet the conquered heretics Arius, Averroës, and Sabellius, and on both sides the solemn figures of saints and prophets. Finally, below this row there are fourteen

Fig. 424. S. Benedict exorcising Demons. Fresco in San Miniato, by Spinello Aretino.

female figures personifying the virtues, the arts, and the sciences, with historical or mythological personages representative of these mental tendencies placed at their feet. Scholastic as is the theme, a profusion of significant characteristics is brought into prominence in its presentment. These works have been generally ascribed to Taddeo Gaddi, and the important Crucifixion over the altar is assigned to Simone Martini; but later criticism assigns the last-named work to Antonio Veneziano (died about 1390), and the others generally to Andrea da Firenze, in the early years of the fifteenth century.

Orcagna, who has already come under our notice as an architect and sculptor, is one of the most noted successors of Giotto, and allied to him in genius. The Strozzi Chapel in Santa Maria Novella at Florence contains a number of his creations. There is a representation of the Last Judgment on the wall above and on either side the window. The Judge of the world, enthroned in solemn majesty, is surrounded by floating angels with trumpets and instruments of martyrdom. The Madonna and S. John the Baptist are kneeling in attitudes of humble supplication; adjoining, on either side, are the sturdy, vigorous figures of the apostles; below, men rising from the dead, a multitude of saints and of the congregation of the faithful, all bright figures upon a dark-blue ground, and all of great beauty. The predominant expression, however, is that of character and impressiveness. The representation of Paradise on the left wall is still more remarkable. Christ is enthroned beside the Madonna, beneath a Gothic canopy, surrounded by angels. The whole remaining space is occupied by twelve rows of figures of saints, containing seven on either side, traditionally stiff in arrangement, and lacking in picturesque grouping; but the glorious beauty of the heads, the free and characteristic treatment of the single figures, the inexhaustible variety in the arrangement of the draperies are truly delightful. No other picture in the whole Gothic period unites such incomparable richness and beauty. The coloring is clear, light, and warm; the faces are of a lovely oval shape, with noble, youthful features, a delicate profile, and careful modeling, with warm tones in the shading. There is a marked improvement upon the manner of Giotto in the drawing and pose of the figures. The same may be said of the altar-piece of this chapel, painted on panel and rising above a predella, which is inscribed with Orcagna's name and the date 1357. On this Christ is represented throned in glory, and surrounded by angels, giving the key to the kneeling S. Peter with his left hand; while with his right he gives the book to S. Thomas Aquinas, who is also represented as kneeling, and presented by the Madonna. Another altar-piece by the same master, divided into numerous compartments, now in the National Gallery in London, was formerly in the Church of San Pietro Maggiore in Florence. The middle compartment contains a Coronation of the Blessed Virgin, consisting of numerous figures, constrained in attitude, but with fine heads and magnificent draperies.

The great pictures, in the Campo Santo at Pisa, of the Last Judgment, and more especially the Triumph of Death, illustrate this master's profound knowledge of composition and his powerful grasp of the meaning of life. These works were universally ascribed to him

upon Vasari's authority, until Crowe and Cavalcaselle raised the point of their genuineness. They are now commonly ascribed to Pietro and Broggio Lorenzetti of Siena (died about 1350). It is not to be denied that these pictures differ essentially from the manner of Orcagna's acknowledged works; but certainly the yet undiscovered artist belongs to the most noted masters of that day. This is especially true of the Triumph of Death. If in other great works of the kind the painter was obliged to follow the traditions of the Church, in this a great master sets forth the transitoriness of all that is earthly in a free, bold style, and exhibits Death as the implacable

Fig. 425. Group of Beggars. From the Triumph of Death; ascribed to Orcagna.

destroyer of all that is blooming, fair, and glorious. On the right there is a company of knights and ladies, in the costumes of the period, on a flowery sward, bordered by luxurious orange-trees, amid whose branches Cupids are hovering—the knights with falcons on their hands, the ladies with lap-dogs. They are listening in pleasant ease to the strains of the lute and to song; so that one fancies himself transported into the gay company of "The Decameron" of Boccaccio. But meanwhile the frightful form of Death, in the guise of a hideous woman, comes unexpected, rushing through the air, with black hair streaming, the sickle sweeping for the fatal stroke.

Strewed about her in ghastly heaps lies a rich harvest of death—princes and lords of the world, whose souls are borne away by devils and angels descending. These fortunate mortals have fallen a prey to death without a note of warning; while a group of the sick, the halt, and the wretched are represented with arms outstretched toward the Angel of Death, supplicating in vain her whom they regard as

Fig. 426. Madonna. By Guido da Siena. Church of S. Dominic, Siena.

their only friend (Fig. 425). High rocks tower up, from whose clefts issues a gay cavalcade of lords and ladies hunting. But suddenly the animals start back, the hounds become restless, and the gallant train comes to a halt; for directly in front of this smiling life three graves open, showing the moldering corpses of princes. A gray-bearded hermit stands by, and points out to the great ones of the earth the terrible reminder of the nothingness of all earthly things.

Farther up the mountain height are other pious men, who lead a life of renunciation in a solitude consecrated to the service of God, far from the whirl of life. In the regions of the air, good and bad spirits are contending for the souls of the departed. The saved are borne away to the right, by soaring angels, into blessedness; the damned are plunged, by fantastic demon-shapes, into the fiery abyss of a flaming mountain. Perhaps the triumph of death over the whole of creation has never been so poetically and powerfully depicted. The

Fig. 427. From Duccio's Picture in the Cathedral of Siena.

execution is slight, and does not attain the tranquil beauty and purity of the pictures in Santa Maria Novella; but the impress of a great master is unmistakable. Here, as in Santa Maria Novella, adjoining a fresco of the Last Judgment, is a representation of Hell by Bernardo Orcagna, the brother of Andrea; but whereas the Campo Santo picture is distinguished by a certain horribleness and weirdness, that in Santa Maria Novella is merely an unfortunate attempt to translate into painting the wonderful grouping and herding together of the wretched souls in Dante's "Inferno."

The great Sienese master, Duccio di Buoninsegna, although his work extends into the fourteenth century, based it upon Byzantine

tradition; but it coupled it with a grace, beauty, and vigor which testify to a free artistic conception. His great altar-piece in the Siena Cathedral, finished in 1311, and now, unfortunately, hanging in a wing of the transept of the same church in a very unfavorable light, portrays on the principal side the Madonna between saints arranged in rows, full of beauty and charm, although in the Byzantine manner. On the other side are scenes from Christ's passion, in smaller figures, from which we copy the expressive group of the Washing of the Disciples' Feet (Fig. 427). Severe elevation of style unites with deep thought, noble beauty, and emotional strength to produce a strangely effective picture.

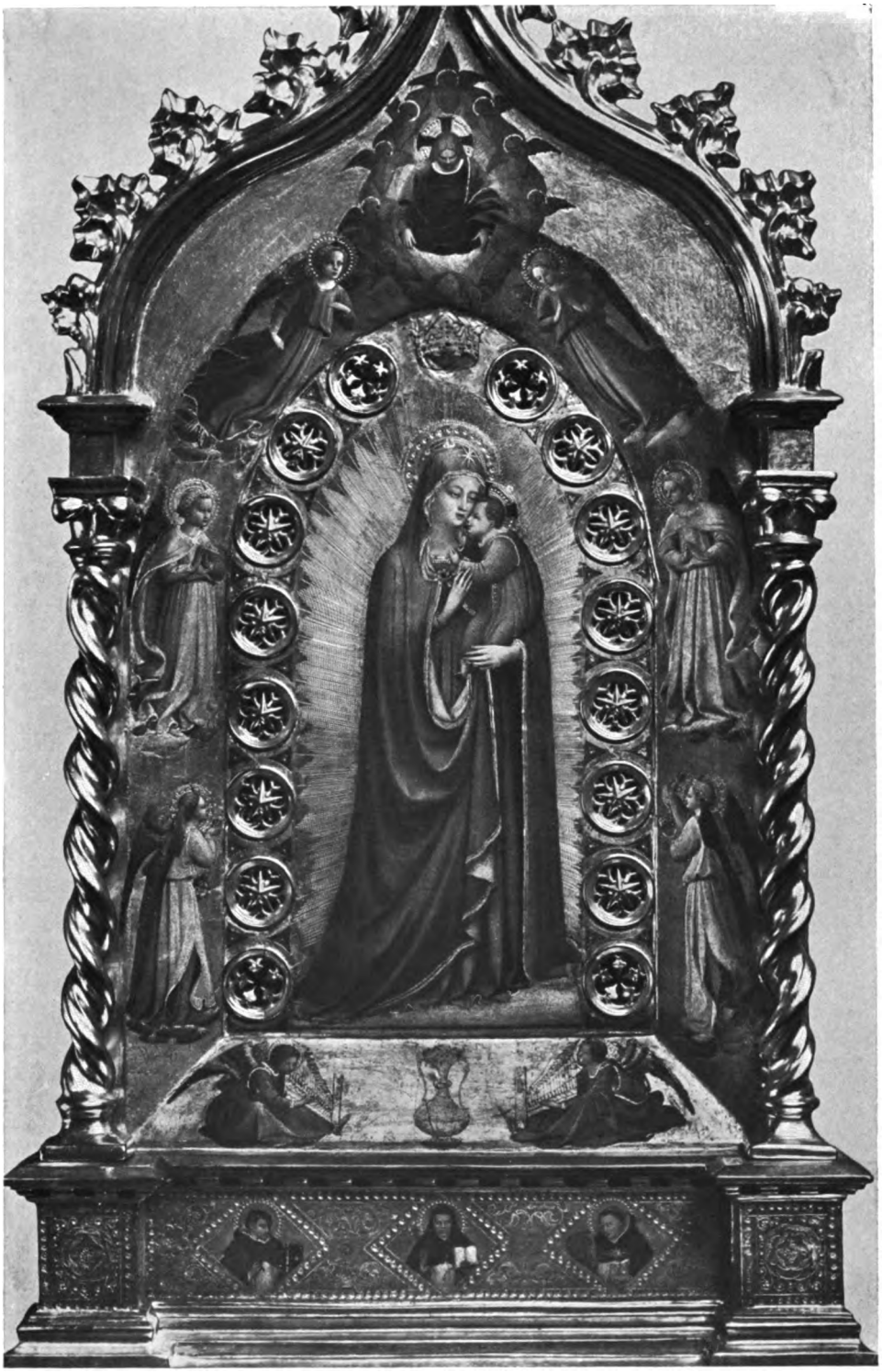
The school of Siena is essentially different from that of Florence. In fact, the Sienese school aims less at representing actual life than at portraying the inner life of feeling. It reaches out even toward mysticism. Its artists commonly devote themselves to a loving delineation of single figures, beautiful with the loveliness of the soul, which they represent oftener within the confined limits of altar-pieces than in extended frescos. In this respect they are related to Northern art. Simone di Martino generally but erroneously styled Simone Memmi (1276-1344), is the chief artist of this school. His few pictures—for instance, a Madonna with saints in the Academy of Siena, and two Madonnas in the Berlin Museum—breathe a profound sensibility and spiritual beauty. His masterpiece, however, is the wall-picture of the Madonna as the Queen of Heaven, in the Palazzo Pubblico at Siena. Under a canopy held by the patron saints of the city the sublime form of the heavenly Queen is enthroned with the Christ-child standing in her lap. Two kneeling angels are offering baskets with roses, while many saints surround the Mother of God like a heavenly bodyguard. This important work is characterized by noble rhythm, majesty, and graceful expression. Simone left Italy and worked at the papal court in Avignon from 1339 until his death. In the great palace of the popes considerable remains of his mural paintings are to be seen in both chapels; in the lower, the story of John the Baptist; in the upper, several legends of saints, productions of great exuberance and vital power, mighty and yet graceful forms. The same style is exhibited in the pictures of prophets, dignified and simple in their finished modeling, which were displayed on the vaults of the imposing Hall of the Consistory. The paintings in the vestibule of the cathedral near by are much destroyed, however, although they allow features of the same artistic manner to be recognized. Lippo Memmi should be singled out from other Sienese masters; his altar-pieces are in the manner of Simone. For the Palazzo Pubblico at San Gimignano he painted in 1317 a

large wall-picture of the Madonna enthroned with saints, which in its main features resembles that of his brother-in-law. Furthermore the brothers Pietro and Ambrogio Lorenzetti, who have been named already, must be ranked high among their contemporaries. Of these, the younger, Ambrogio, executed from 1337 onward, the large mural paintings in the Palazzo Pubblico at Siena, depicting the government of Good and Evil in a profusion of highly fantastic and poetic traits. Especially the gigantic form of the good ruler enthroned amid graceful female figures representative of the regent's virtues, is of striking grandeur. Below, the senators of Siena are seen approaching from the right, while on the left of the mighty ruler the malefactors are led in fetters by the myrmidons to the steps of the throne.

The power of the Sienese school was limited. Far from attaining to a larger, more intense life, this school soon lapses into an idyllic, tranquil existence. It allows the great transformations which swept over Italian art in the fifteenth century to pass unheeded, and finally abandons itself to a mere mechanical repetition of traditional formulas.

A new and thoroughly independent development of painting took place in Italy in the beginning of the fifteenth century. The distinctive features of the new method were a vigorous comprehension of nature, a thorough study of form, and a complete insight into coloring and perspective. Almost all the painters of this epoch united in establishing a new manner, known as the realistic, and in thus laying the foundations of modern art. One artist, however, in the seclusion of his cloister, remained true to the traditions and mode of expression of the Middle Ages, into which, nevertheless, the incomparable beauty and feeling of his nature breathed fresh life. Fra Giovanni Angelico—called da Fiesole, from the place of his birth (1387-1455)—occupies an entirely exceptional position. He is the late-blooming flower of an almost bygone time amid the pulsations of a new life. Never, in the whole range of pictorial art, have the inspired fervor of Christian feeling, the angelic beauty and purity of which the soul is capable, been so gloriously interpreted as in his works. The exquisite atmosphere of an almost supernaturally ideal life surrounds his pictures, irradiates the rosy features of his youthful faces, or greets us, like the peace of God, in the dignified figures of his devout old men. His prevailing themes are the humility of soul of those who have joyfully accepted the will of God, and the tranquil Sabbath calm of those who are lovingly consecrated to the service of the Highest. The movement and the changing course of life, the energy of passion and action, concern him not. His range is limited,

Tabernacle or altar-piece for a private chapel, with receptacles for relics of saints, and a painting by Fra Angelico da Fiesole, the frame being also painted in the style of that master and perhaps by his hand. This artist, a Dominican monk whose name was Giovanni (John), took the name of Angelico when he took orders. The adjective Beato (blessed) often added to his name, indicates an inferior beatification that is somewhat less important than the term saint.



FRA ANGELICO

MADONNA OF THE STAR, IN THE CONVENT OF SAN MARCO, FLORENCE

although a continuation of that which the Sienese strove after. But within its confines he attained the highest excellence; and he gave to the ideal a more complete development, by means of glowing coloring, imperishable freshness and beauty of tints, and delicate modeling, as well as by an unsurpassable arrangement of drapery and by distinct grouping and an impressive harmony. All of this goes hand-in-hand with a charming, miniature-like delicacy of execution. Numerous panel-pictures, generally of small dimensions, exhibit the harmonious beauty of his art. There is a lack of lifelike energy, however, in his larger figures. There are a number of his smaller pictures in the Academy at Florence, among them a beautiful Life of the Lord, from which we give a Coronation of the Blessed Virgin (Fig. 428).

Fig. 428. The Coronation of the Virgin. By Fra Angelico.

Christ is represented sitting upon clouds by his mother's side. He is placing the crown upon her gently bowed head with both hands, while her hands are crossed upon her breast in modest acceptance. Her whole attitude expresses profound humility and wonder at the honor conferred upon her. The drapery of both figures falls in folds of extreme beauty, and completes the incomparable harmony of the whole picture. There is a picture with the same subject, of similar treatment, in the Louvre at Paris.

One of his most glorious works is a small altar-piece, formerly in the Sacristy of Santa Maria Novella at Florence, now in the old Convent of San Marco in the same city, which has been converted

into a museum for the works of the great master. This altar-piece is a triptych, in three compartments—containing the Annunciation, the Adoration of the three Kings, and the Coronation of the Blessed Virgin. All in a style of the greatest beauty, fervor, and delicacy; the forms finely rounded and excellently draped; the Madonna in the deepest humility, Christ in glorious majesty. This Convent of San Marco in Florence, of which Fra Giovanni was a brother, possesses a series of his finest wall-pictures. In the chapter hall is Christ on the Cross, mourned by his disciples and by the representatives of the church. This is of great earnestness, beauty, and dignity. There are numerous pictures, besides, in the separate cells, characterized by profound fervor; as, for example, the Resurrection, and Christ meeting Mary in the Garden after the Resurrection. The most sublime

Fig. 429. S. Stephen giving Alms. From the Fresco, by Fra Angelico, in the Chapel of Nicholas V., in the Vatican. See also Fig. 420.

of all his works are the paintings on the vaultings of the Chapel of the Madonna di San Brizio in the Cathedral at Orvieto; Christ as the Judge of the world, powerful, impressive, and—what is singular enough—with that energetic movement of the hand, in rejecting the wicked, which Michelangelo afterward employed with such effect in his picture of the Last Judgment. Beside him are beautiful choirs of angels, and angels with trumpets; then the prophets, a wonderfully

composed group of noble figures. Finally in old age (1447) he designed representations from the lives of Saints Stephen and Laurence in the Chapel of Pope Nicholas V. in the Vatican. In these he has taken hold of the problems of life with the energy of a genuine artist, who does not hold himself obstinately aloof from the movements of a new period (Fig. 429).

From 1350 to 1450 there were numerous capable artists in Italy, who to a certain extent were under the dominion of Giotto's influence, but who also modified in an independent manner the general style of

Fig. 430. Extreme Unction. One of the Series of Frescos in the Church of the Incoronata in Naples.

the time. Aldighiero da Zevio is among the most celebrated of these, who decorated the walls of the Chapel of San Felice, in the Church of San Antonio in Padua, in 1370; also Jacopo d' Avanzo, who carried these same paintings to completion, and also decorated the Chapel of St. George adjoining San Antonio, and whose works are conspicuous for liveliness of conception, and richness of coloring. The school of Venice, in the strict sense, begins with the pictures of Antonio Vivarini and Giovanni Alemano (called also Giovanni da Murano), who painted in Venice about this time. In the March of Ancona, that pleasing artist, Gentile da Fabriano, painted pictures,

about the year 1450, which remind us of Giovanni da Fiesole in their tenderness and fervor of sentiment. He is inferior to that artist in religious zeal and devotion; but he excels him in a *naïve,* spontaneous way of treating real life. A joyous, noble spirit is expressed in his paintings, of which, unfortunately, a number of the most excellent have perished. One of the most celebrated of those that have come down to us is an Adoration of the Magi, of the year 1423, now in the Florentine Academy. This is rich in figures and poetical in spirit. There is also an admirable Coronation of the Blessed Virgin, in the Brera Gallery at Milan, by him; and the Berlin Museum owns an Adoration of the Magi which, not less pleasing, exhibits the graceful impress of his art.

In Naples, on the vault of the little Church of Santa Maria l'Incoronata, is a series of pictures, rich in motive, formerly ascribed to Giotto, but now known not to be his, yet showing the hand of an artist influenced by that great master. They embrace the Seven Sacraments (Fig. 430), and also an allegorical Glorification of the Church. The great unknown artist has embodied his subject with a few significant touches in some distinct incident which is narrated with much force of characterization and an abundance of lifelike and striking details. The Sacrament of Penance is especially full of tremendous power. The Sacrament of the Holy Communion is represented with inspiring devotion. Very few figures are introduced in any of the subjects, and the composition and disposition in the space allotted are admirable.

In comparing the general results of the Gothic epoch in Italy with artistic efforts in the North, the fact cannot be disputed that the artistic ideal in the countries north of the Alps was unmistakably an architectural one; in favor of which, Sculpture, and still more Painting, was forced to renounce an independent development. Whereas, in Italy, that lofty architectural ideal gave way before the general development of all three arts, which henceforth march forward hand-in-hand, endowed with equal importance, and contributing to each other's progress. If, in the end, Painting arrived at the highest results of the three arts, it was because of an inner necessity, which was a part of her nature, and which, as we have already stated, made her peculiarly the Christian art, the interpretress of the entire range of Christian thought.